7.7 CONDUCTED SPURIOUS EMISSIONS

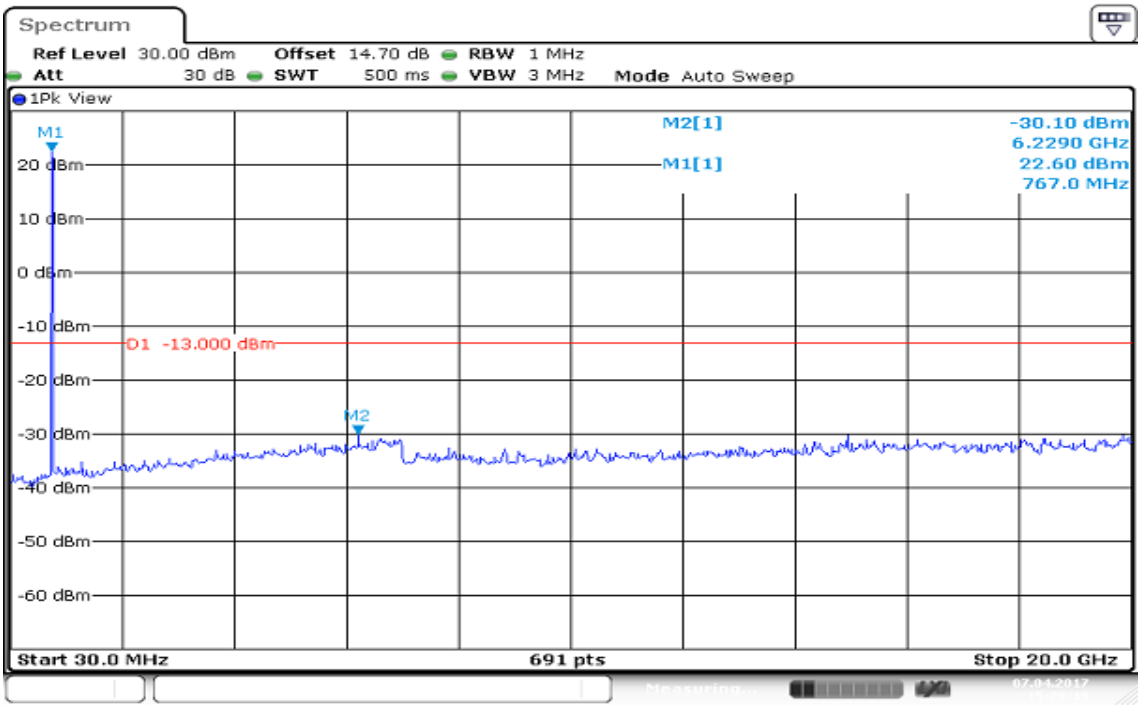
LIMITS

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission equal to –13dBm

TEST PROCEDURES

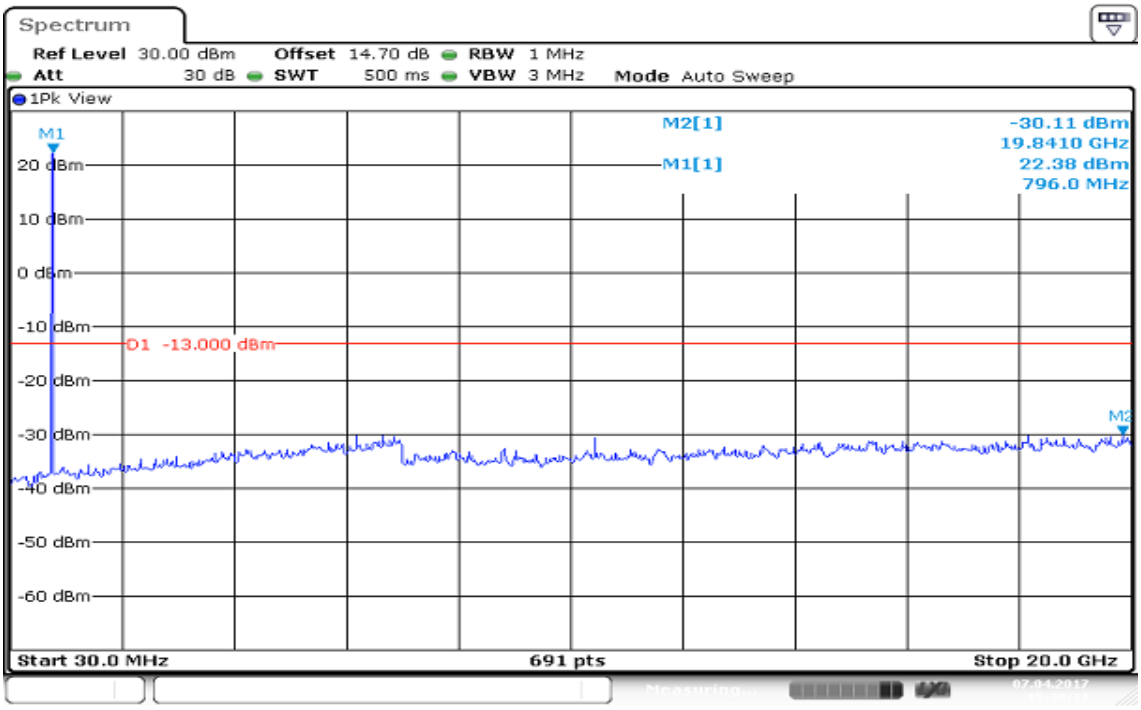
1. According to KDB 971168D01, photograph 6.0
2. The EUT was connect to spectrum analyzer and call box.
3. The RF output of EUT was connected to the spectrum analyzer.
4. Set the spectrum analyzer , RBW=1MHz, VBW=3MHz.
5. Record the maximum spurious emission.
6. The fundamental frequency should be excluded against the limit in operating band.

TEST RESULTS
LTE Band 13
CHANNEL BANDWIDTH: 5MHz / QPSK
CH Low



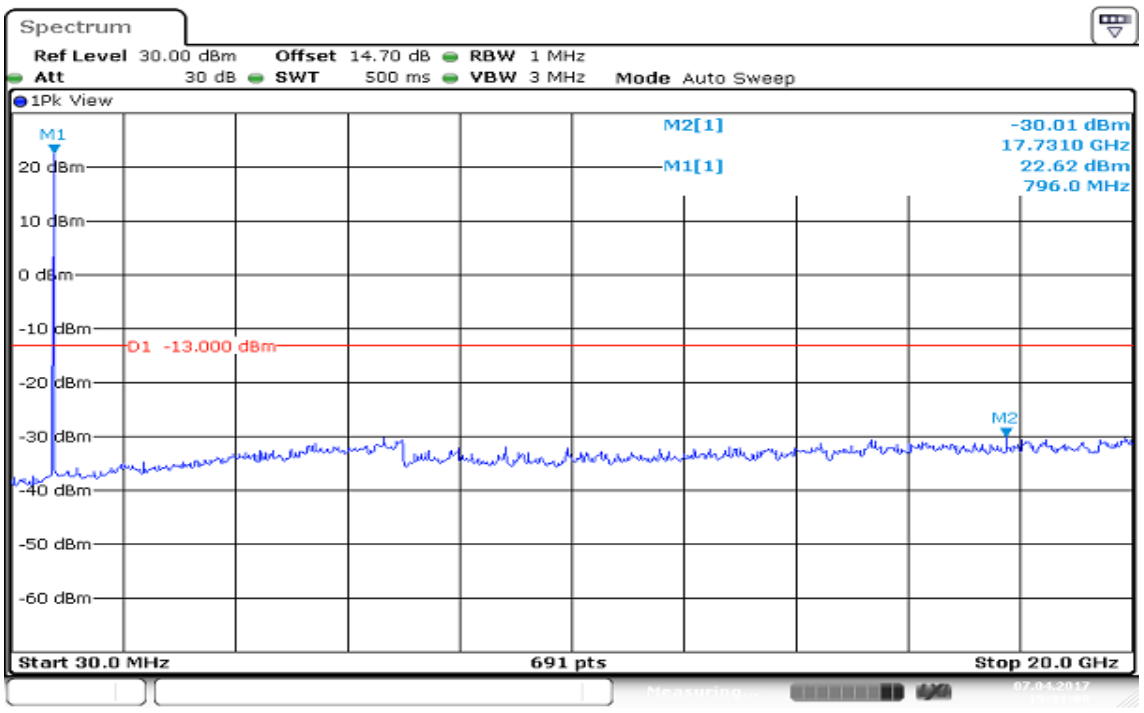
Date: 7.APR.2017 15:28:18

CH Mid



Date: 7.APR.2017 15:30:11

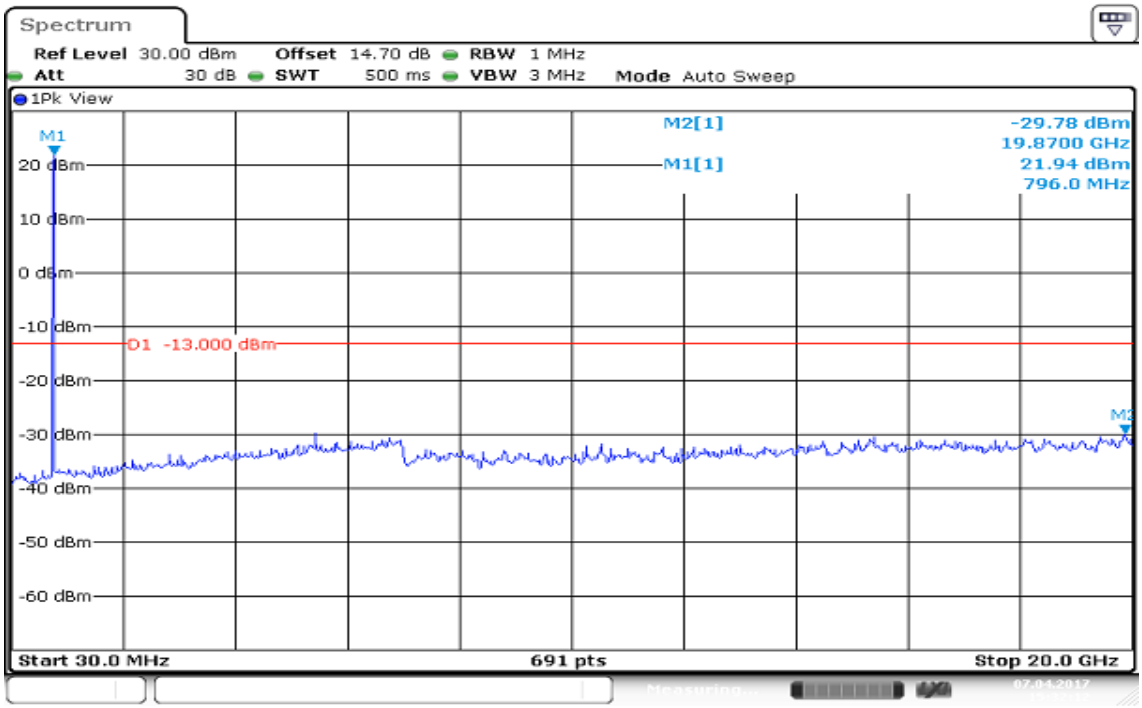
CH High



Date: 7.APR.2017 15:31:00

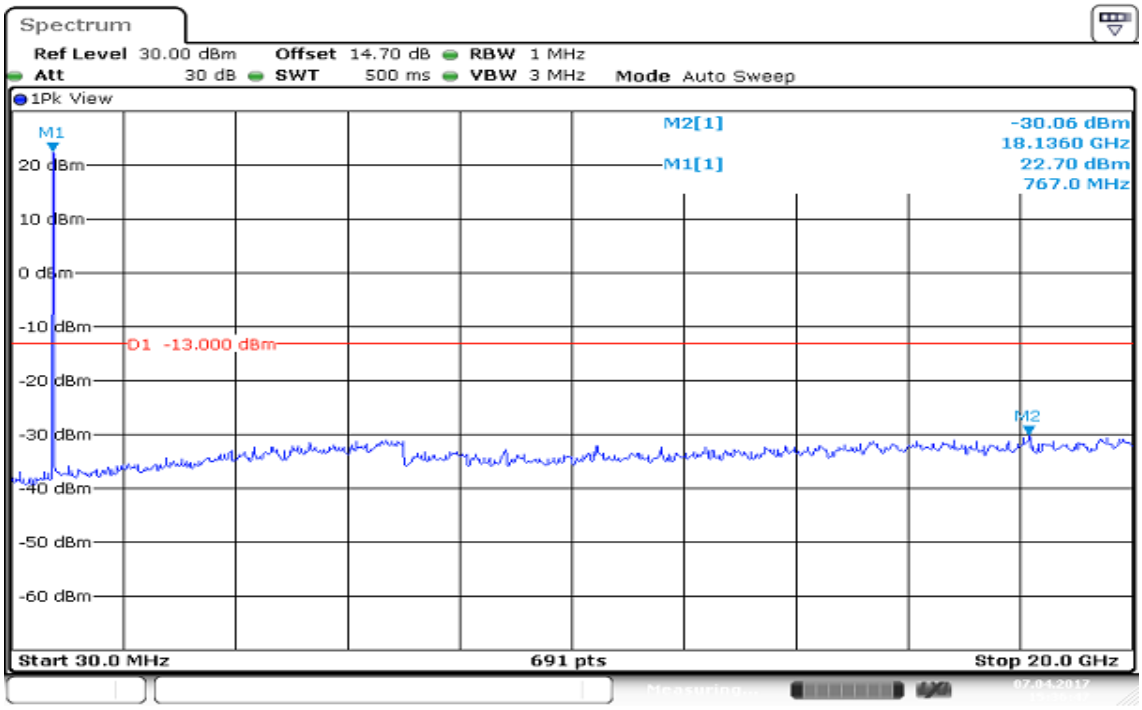
CHANNEL BANDWIDTH: 10MHz / QPSK

CH Mid



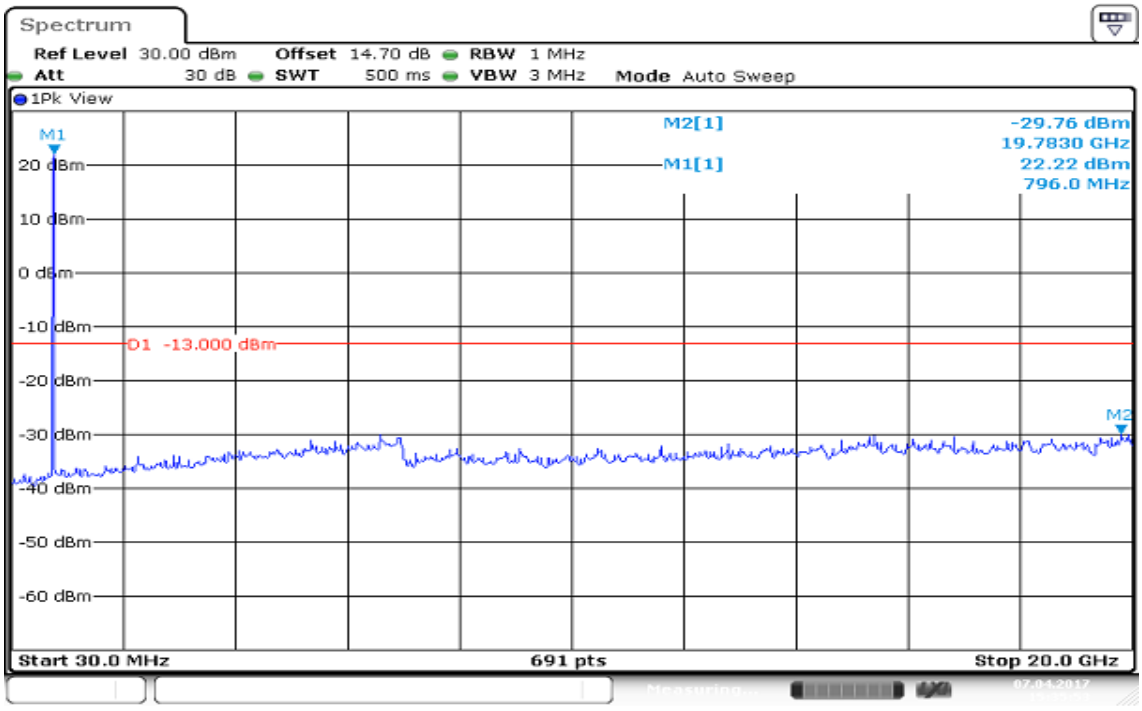
CHANNEL BANDWIDTH: 5MHz / 16QAM

CH Low



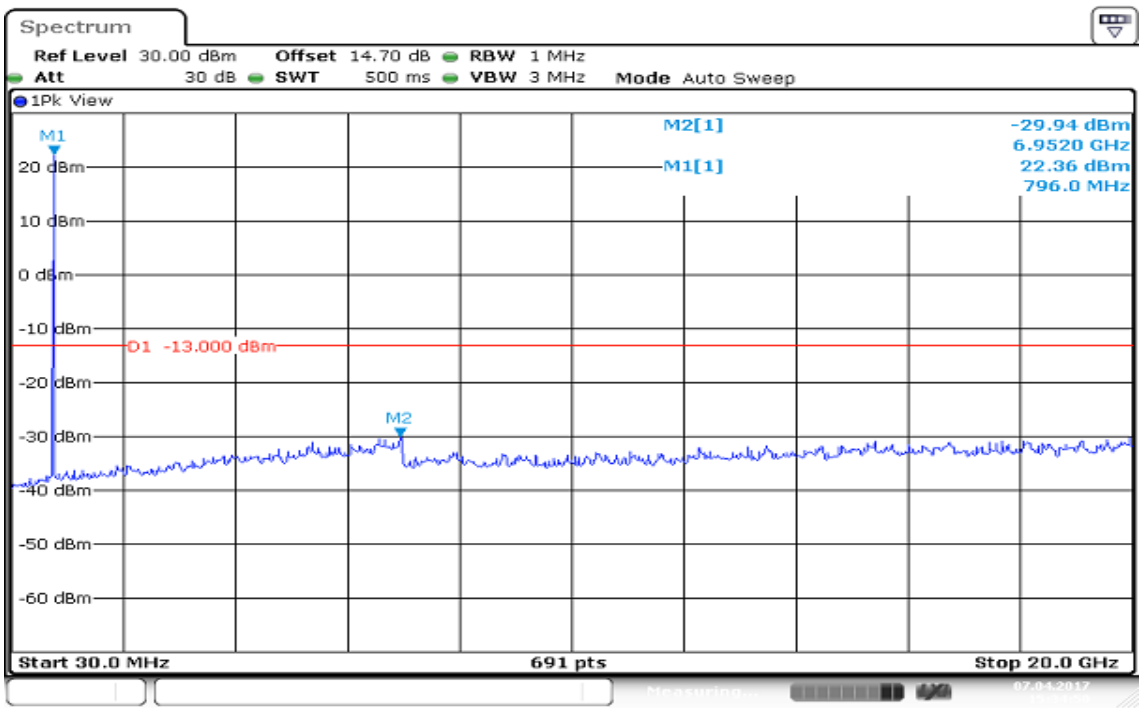
Date: 7.APR.2017 15:36:47

CH Mid



Date: 7.APR.2017 15:35:53

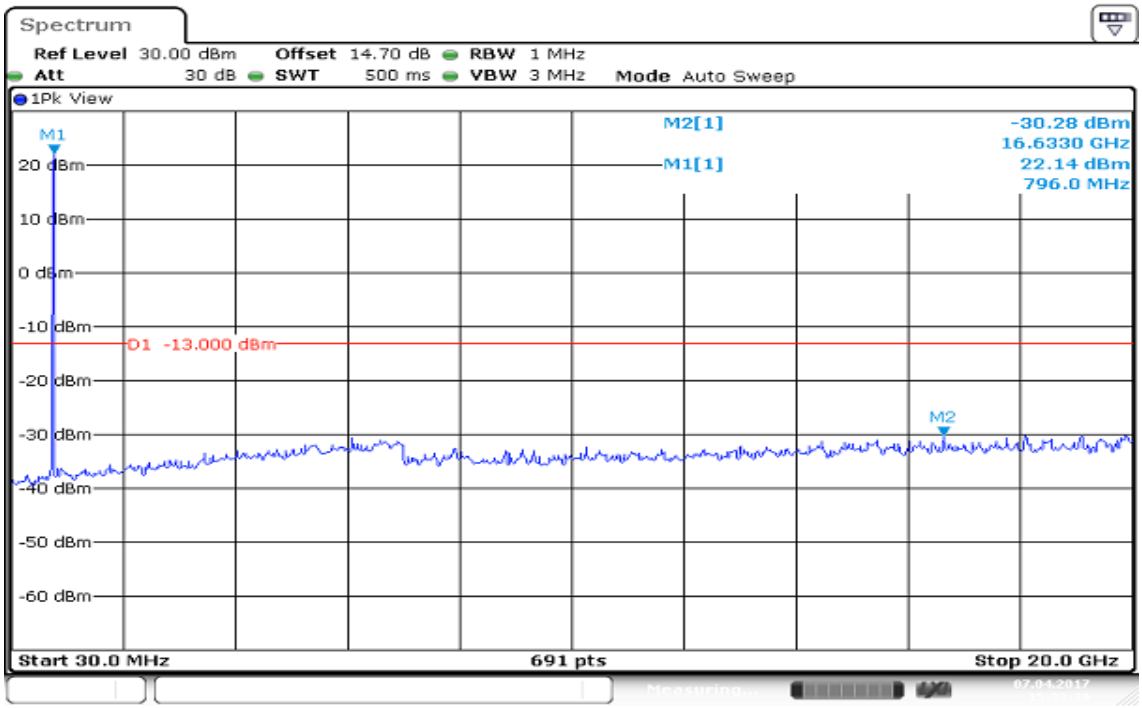
CH High



Date: 7.APR.2017 15:34:50

CHANNEL BANDWIDTH: 10MHz / 16QAM

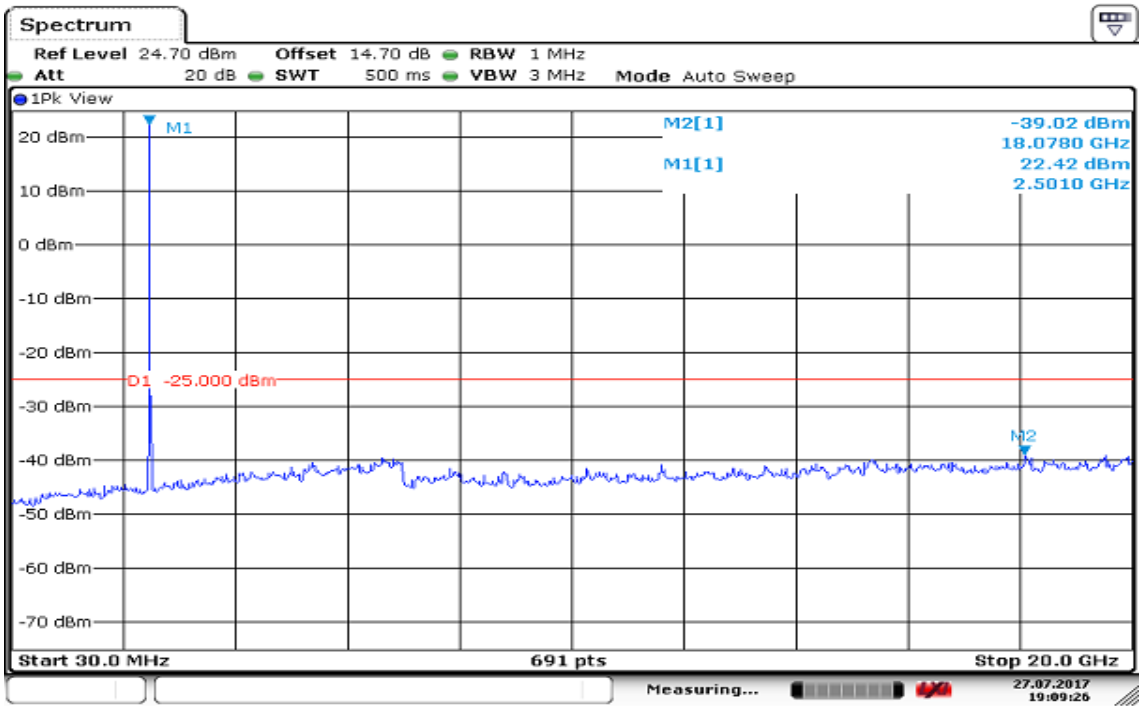
CH Mid



LTE Band 7

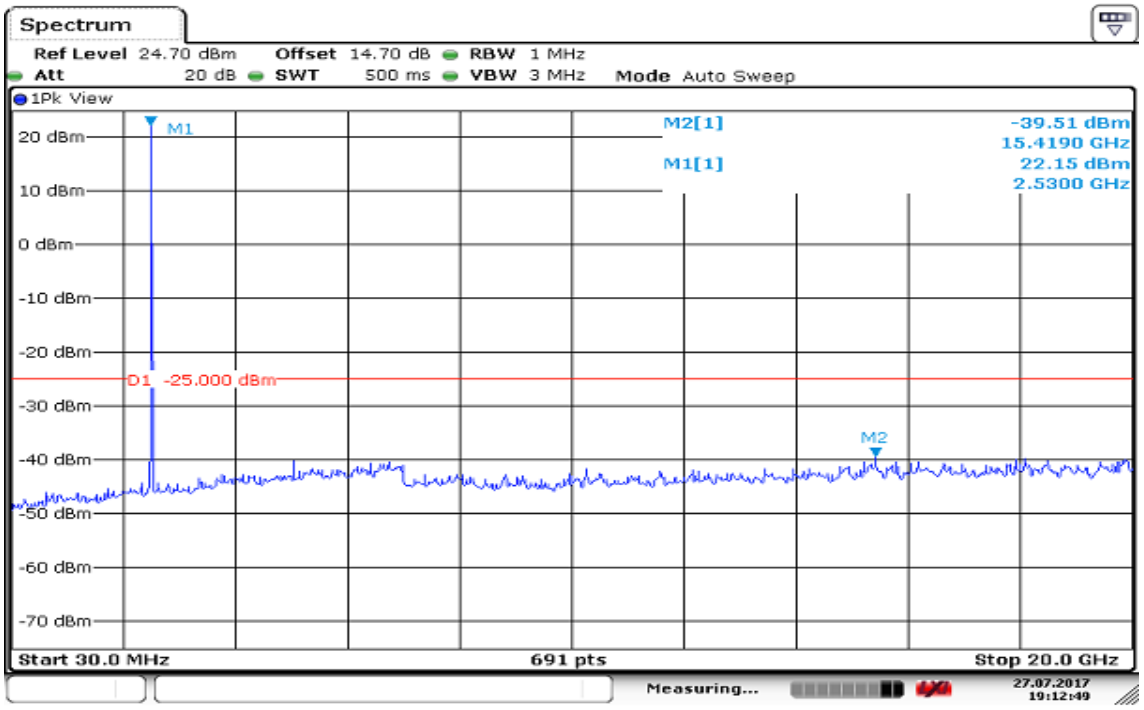
CHANNEL BANDWIDTH: 5MHz /QPSK

CH Low



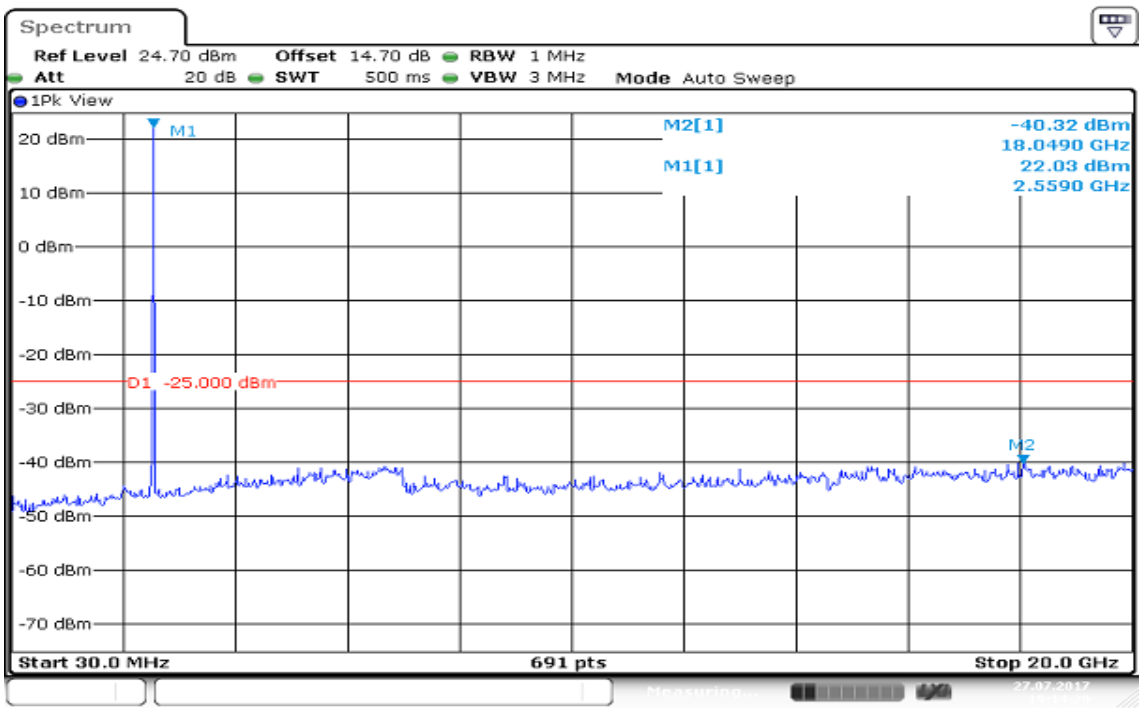
Date: 27.JUL.2017 19:09:26

CH Mid



Date: 27.JUL.2017 19:12:49

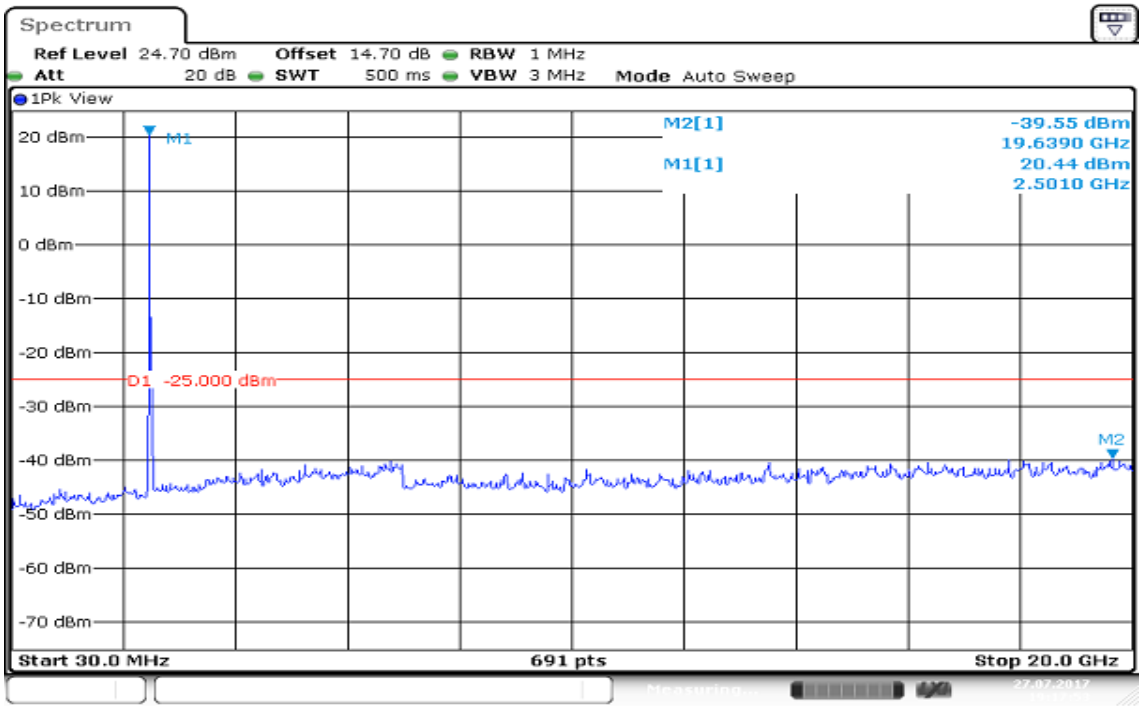
CH High



Date: 27.JUL.2017 19:14:20

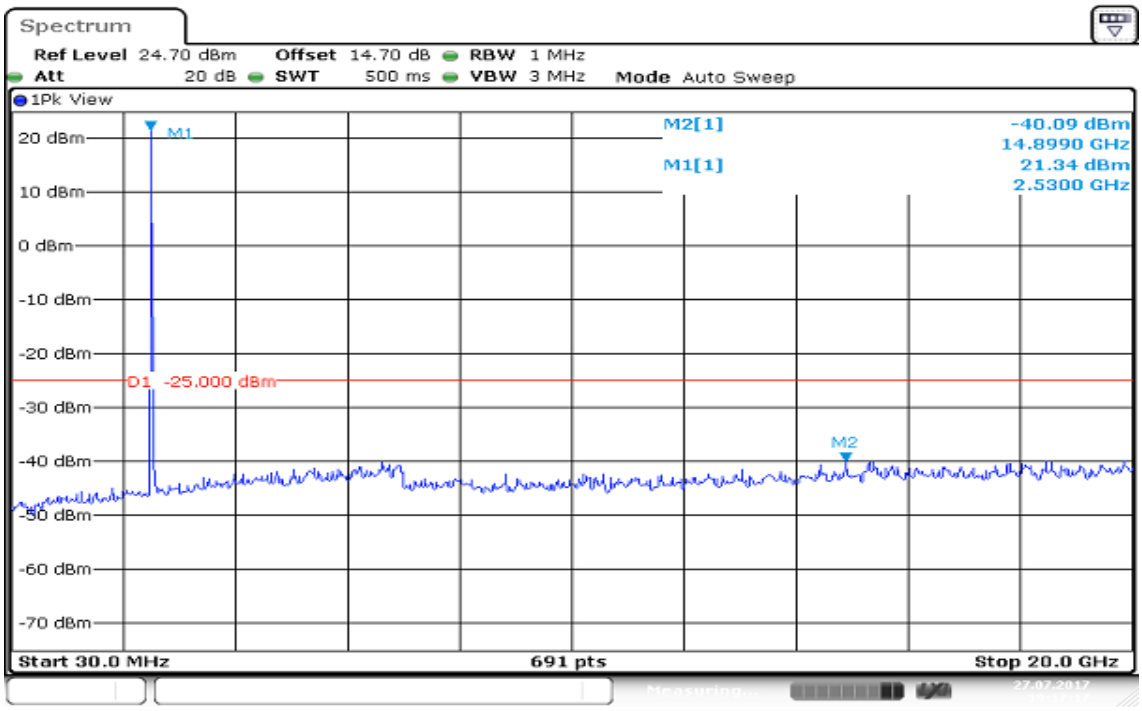
CHANNEL BANDWIDTH: 10MHz /QPSK

CH Low



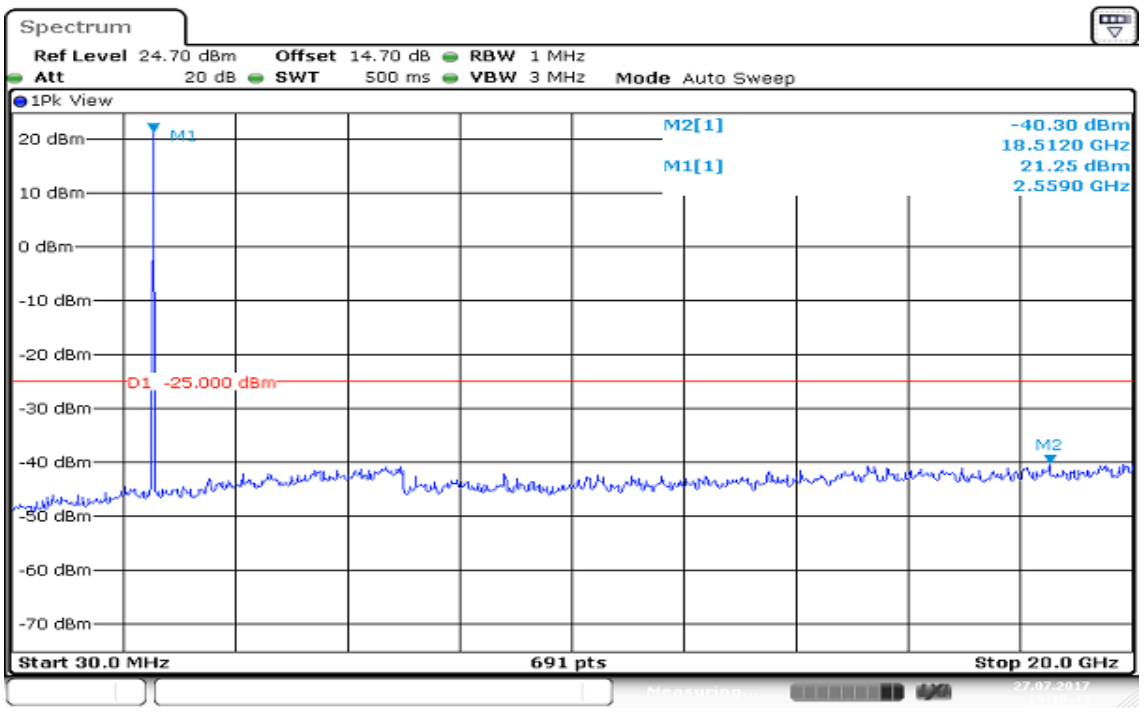
Date: 27.JUL.2017 19:17:53

CH Mid



Date: 27.JUL.2017 19:17:17

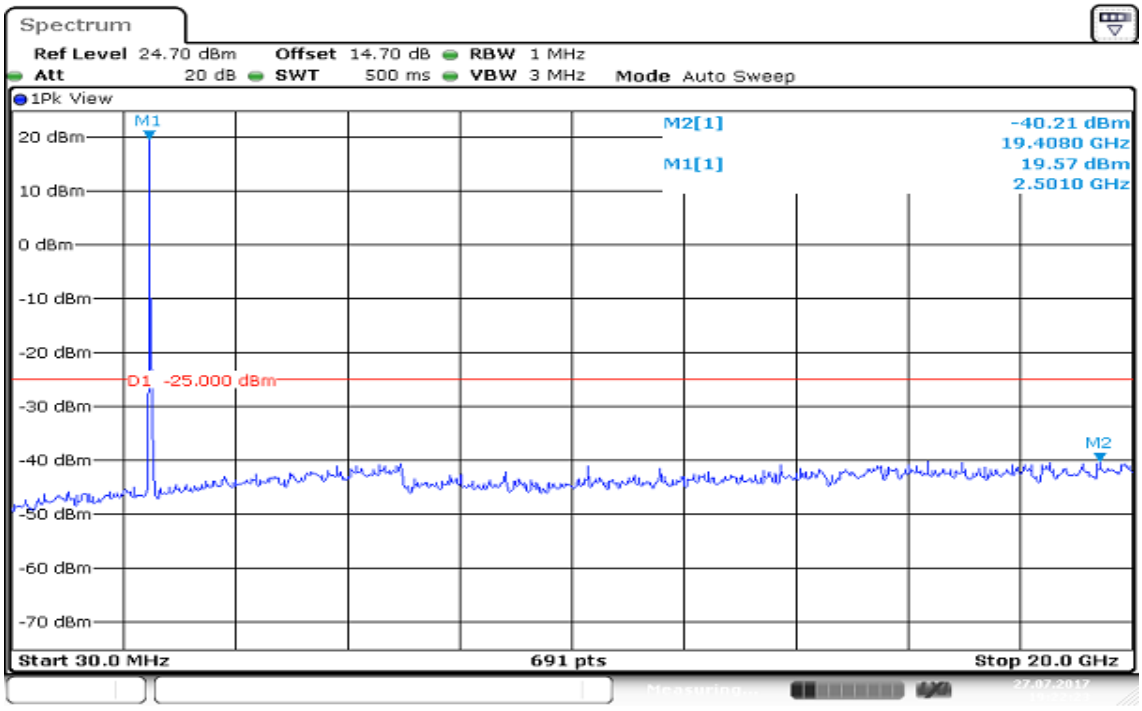
CH High



Date: 27.JUL.2017 19:19:43

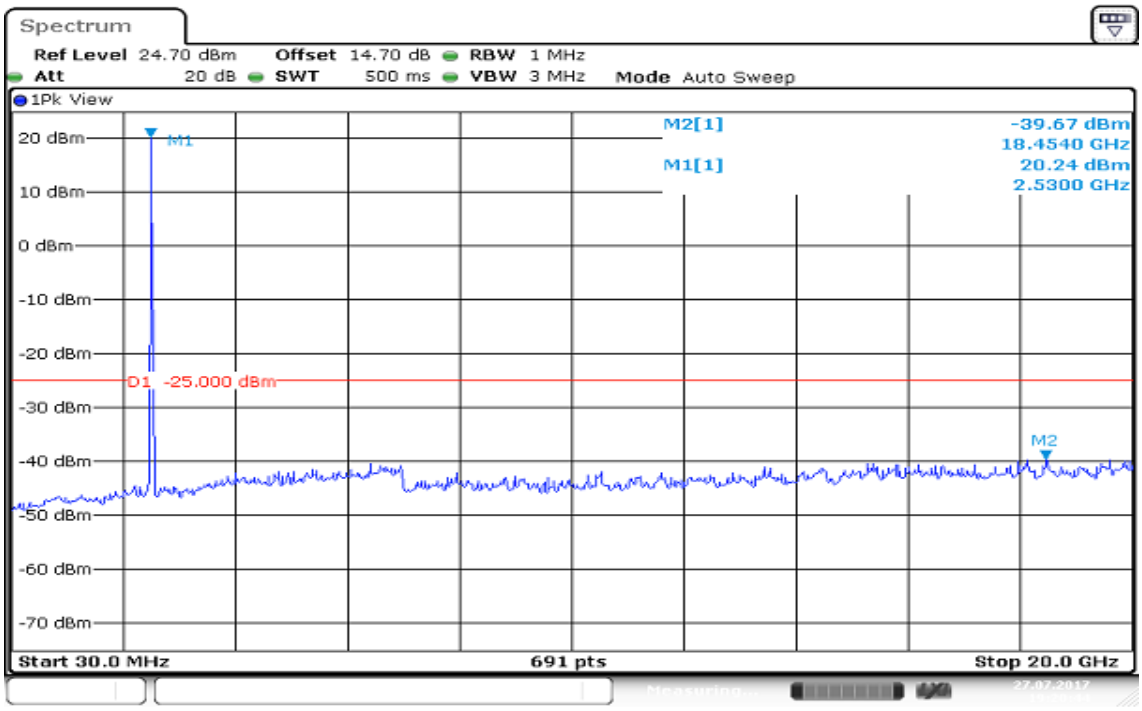
CHANNEL BANDWIDTH: 15MHz /QPSK

CH Low



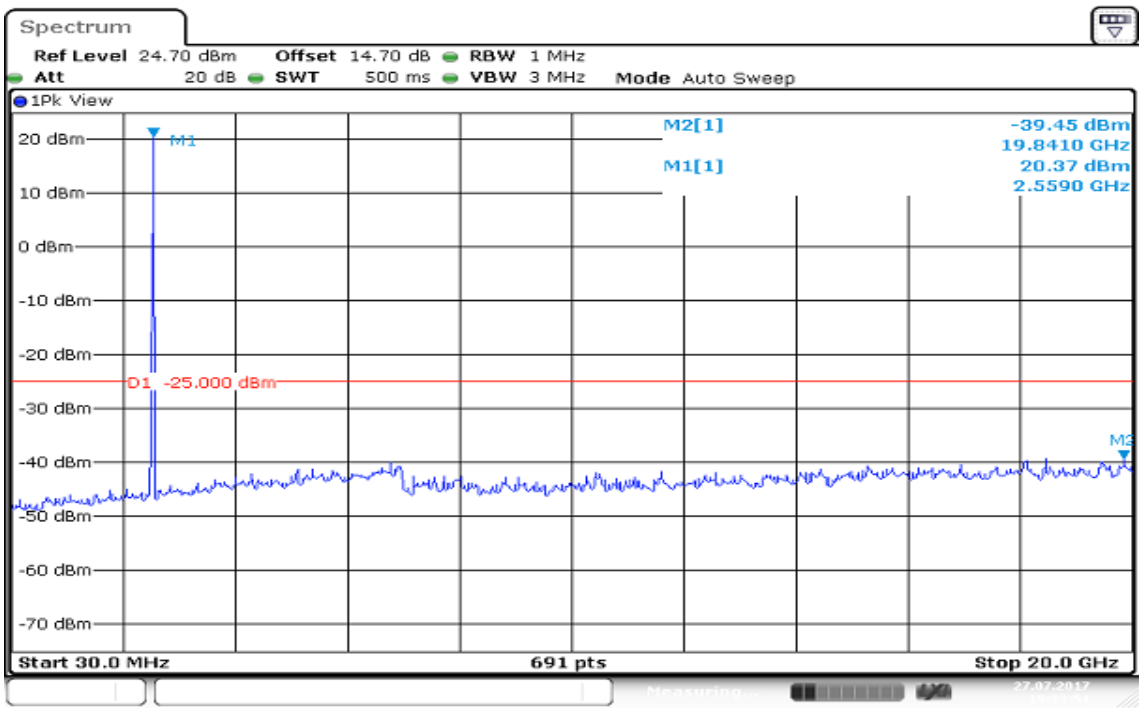
Date: 27.JUL.2017 19:22:23

CH Mid



Date: 27.JUL.2017 19:20:44

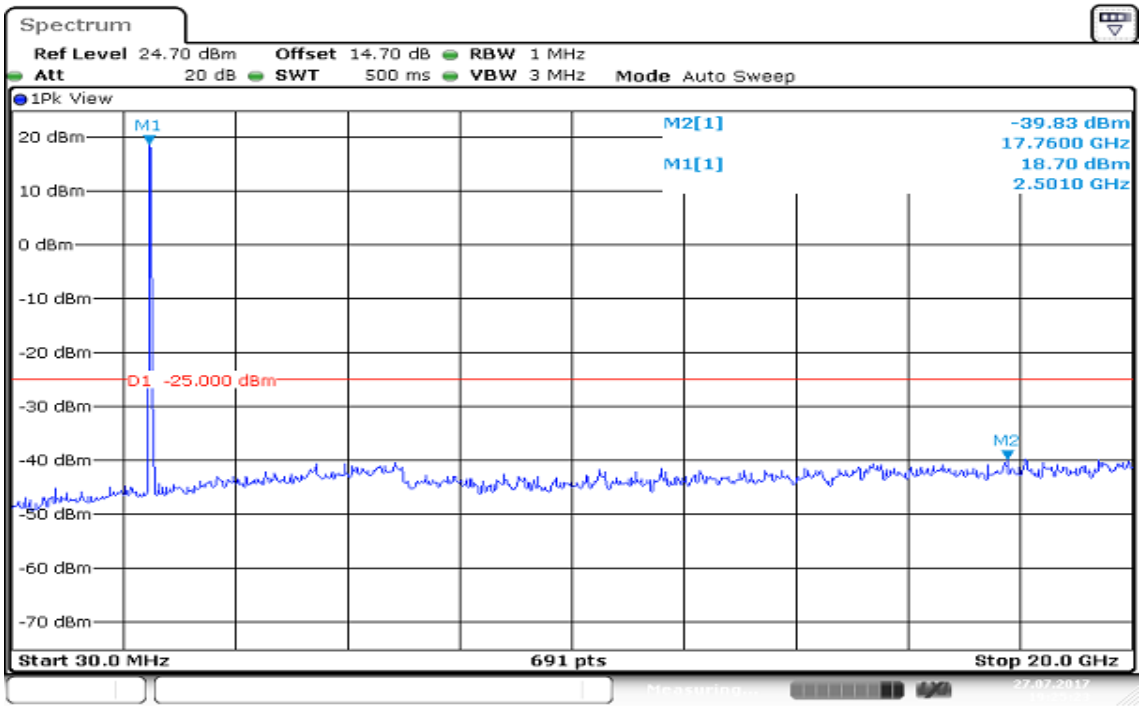
CH High



Date: 27.JUL.2017 19:23:51

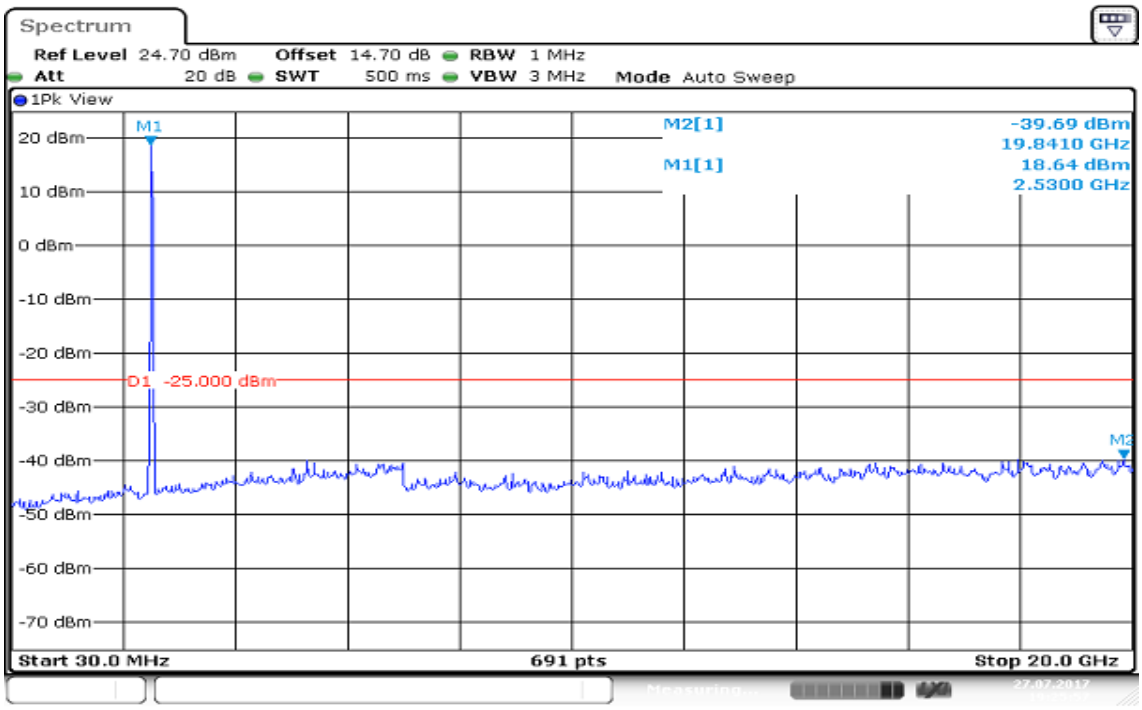
CHANNEL BANDWIDTH: 20MHz /QPSK

CH Low



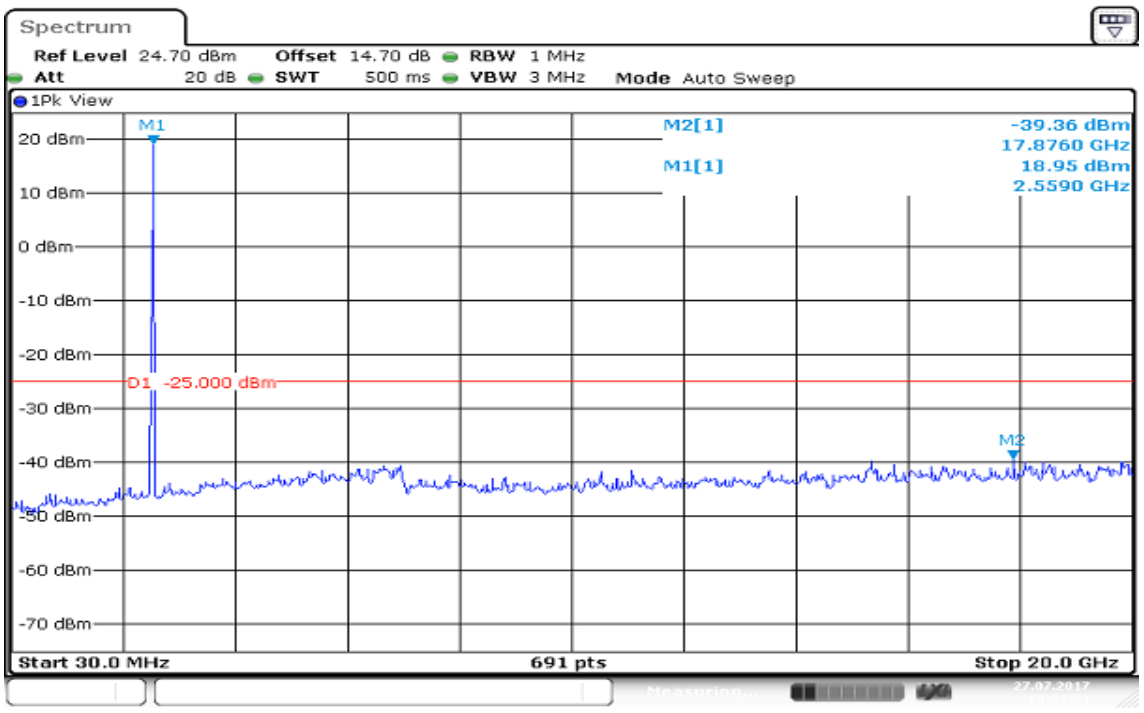
Date: 27.JUL.2017 19:25:23

CH Mid



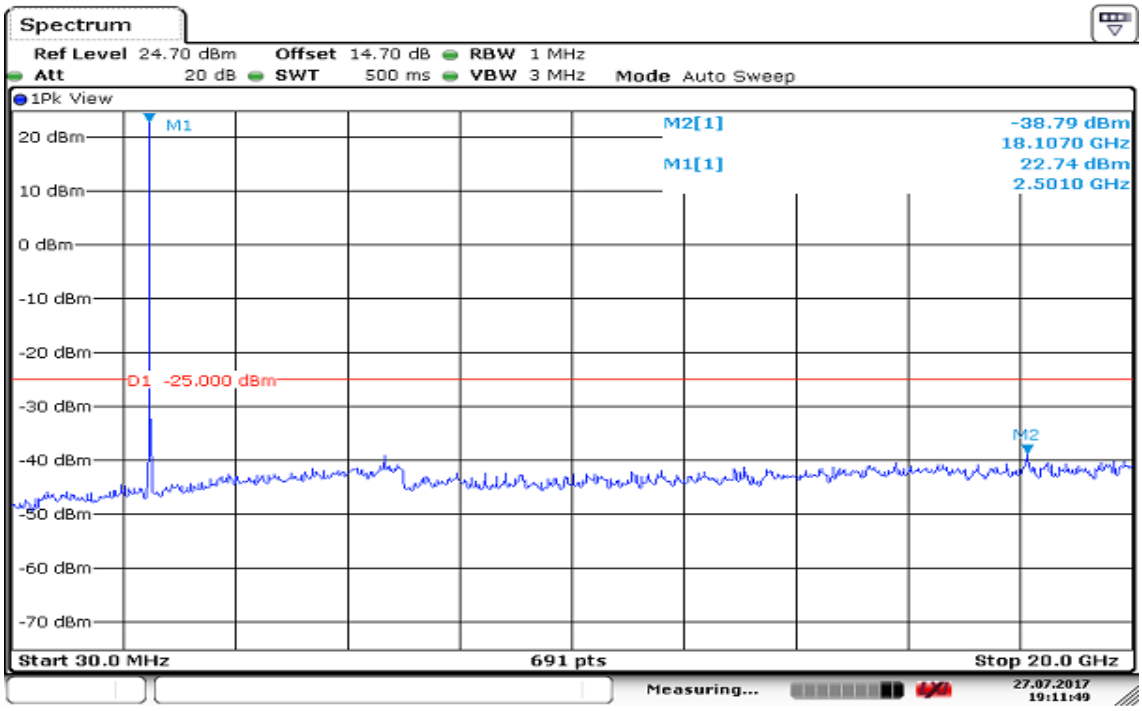
Date: 27.JUL.2017 19:25:57

CH High


Spectrum
Ref Level 24.70 dBm Offset 14.70 dB RBW 1 MHz
Att 20 dB SWT 500 ms VBW 3 MHz Mode Auto Sweep
1Pk View
M1
M2[1] -39.36 dBm
17.8760 GHz
M1[1] 18.95 dBm
2.5590 GHz
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
D1 -25.000 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M2
Start 30.0 MHz
691 pts
Stop 20.0 GHz
Measuring...
27.07.2017
Date: 27.JUL.2017 19:27:51

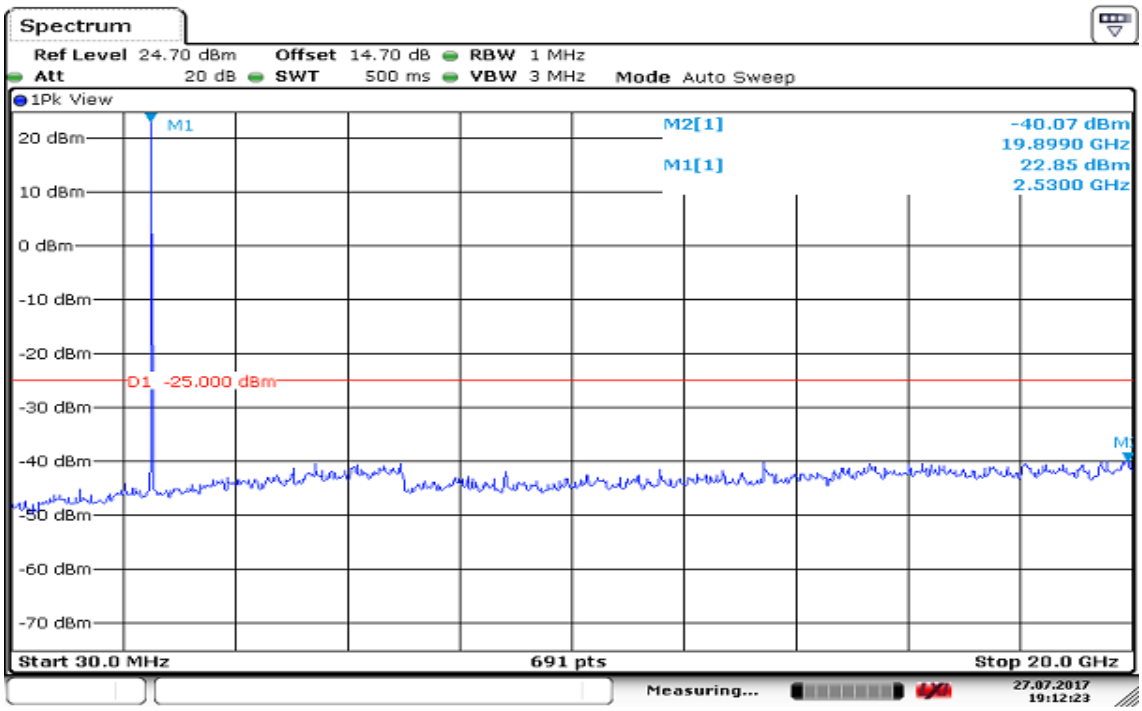
CHANNEL BANDWIDTH:5MHz /16QAM

CH Low



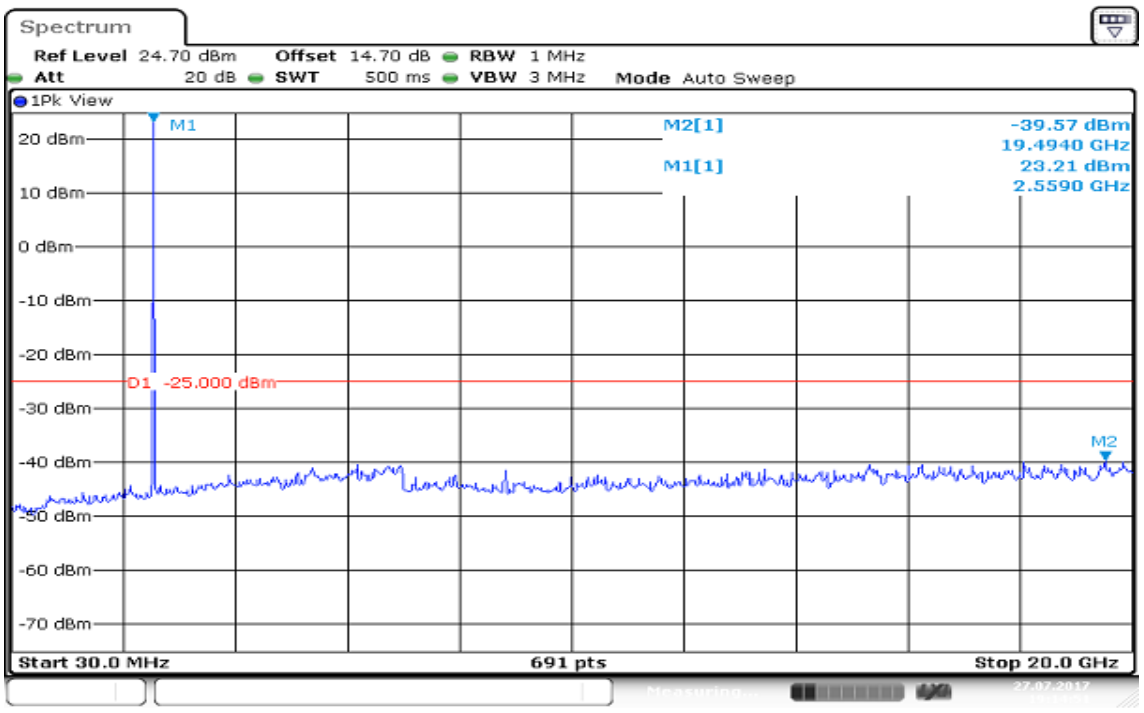
Date: 27.JUL.2017 19:11:49

CH Mid



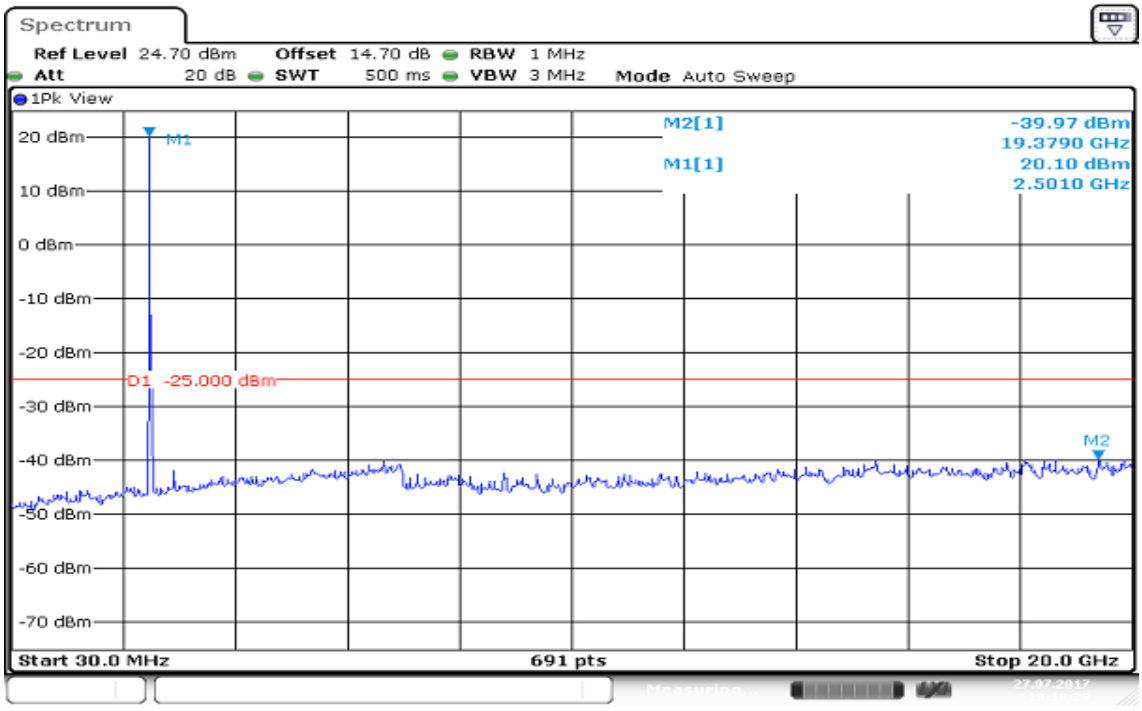
Date: 27.JUL.2017 19:12:24

CH High


Spectrum
Ref Level 24.70 dBm Offset 14.70 dB RBW 1 MHz
Att 20 dB SWT 500 ms VBW 3 MHz Mode Auto Sweep
1Pk View
M1
M2[1] -39.57 dBm
19.4940 GHz
M1[1] 23.21 dBm
2.5590 GHz
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
D1 -25.000 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M2
Start 30.0 MHz
691 pts
Stop 20.0 GHz
Measuring...
27.07.2017
Date: 27.JUL.2017 19:14:51

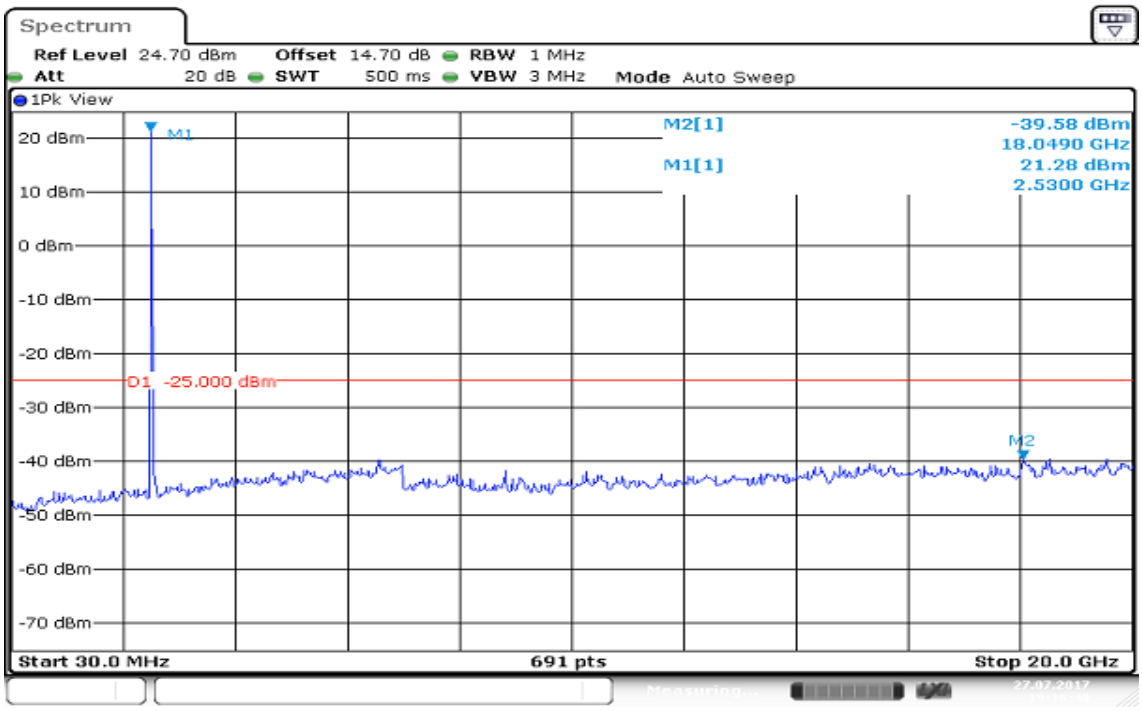
CHANNEL BANDWIDTH:10MHz /16QAM

CH Low



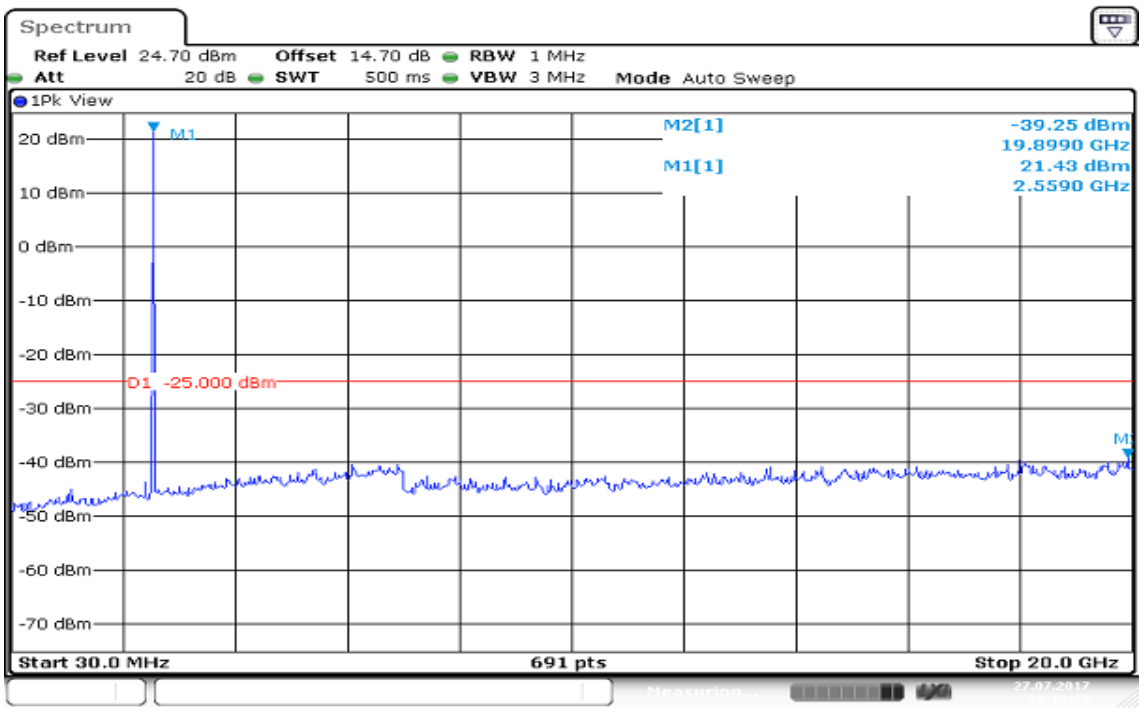
Date: 27.JUL.2017 19:18:29

CH Mid



Date: 27.JUL.2017 19:16:48

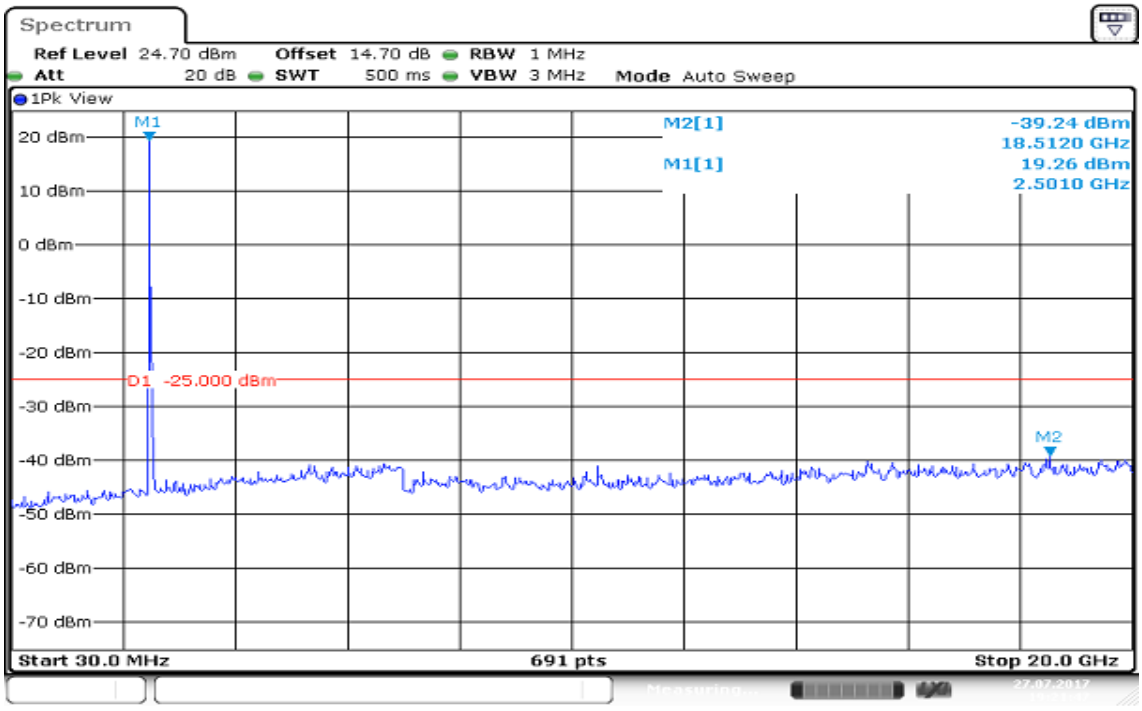
CH High



Date: 27.JUL.2017 19:19:09

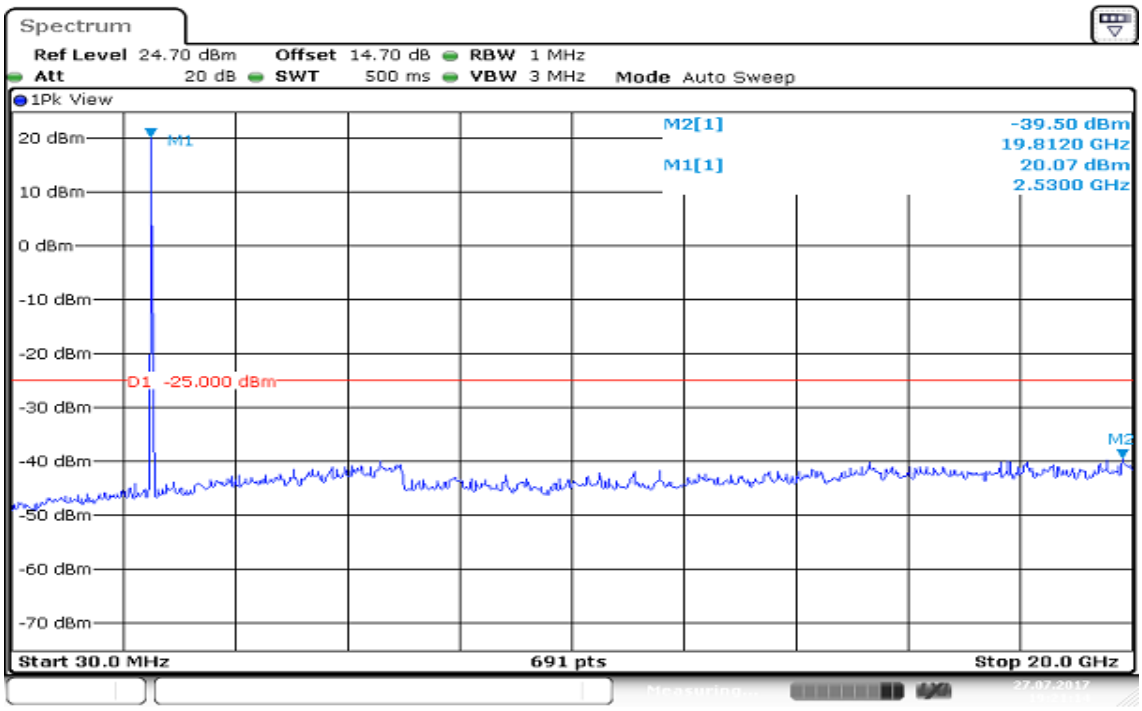
CHANNEL BANDWIDTH:15MHz /16QAM

CH Low



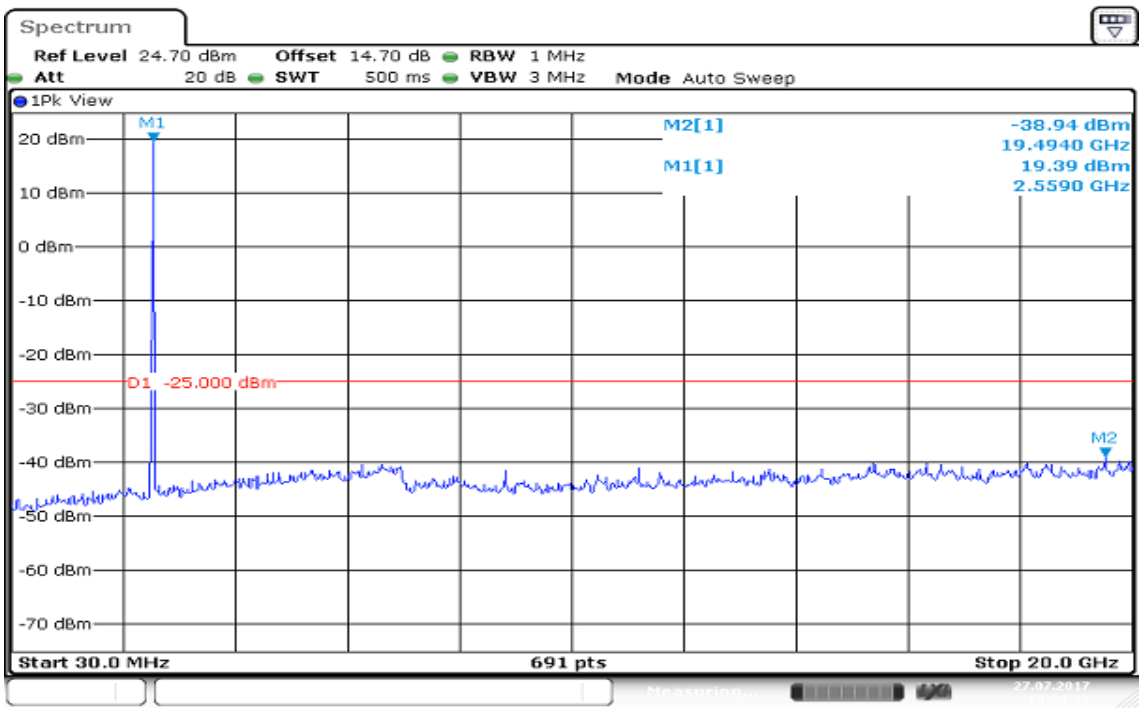
Date: 27.JUL.2017 19:21:47

CH Mid



Date: 27.JUL.2017 19:21:14

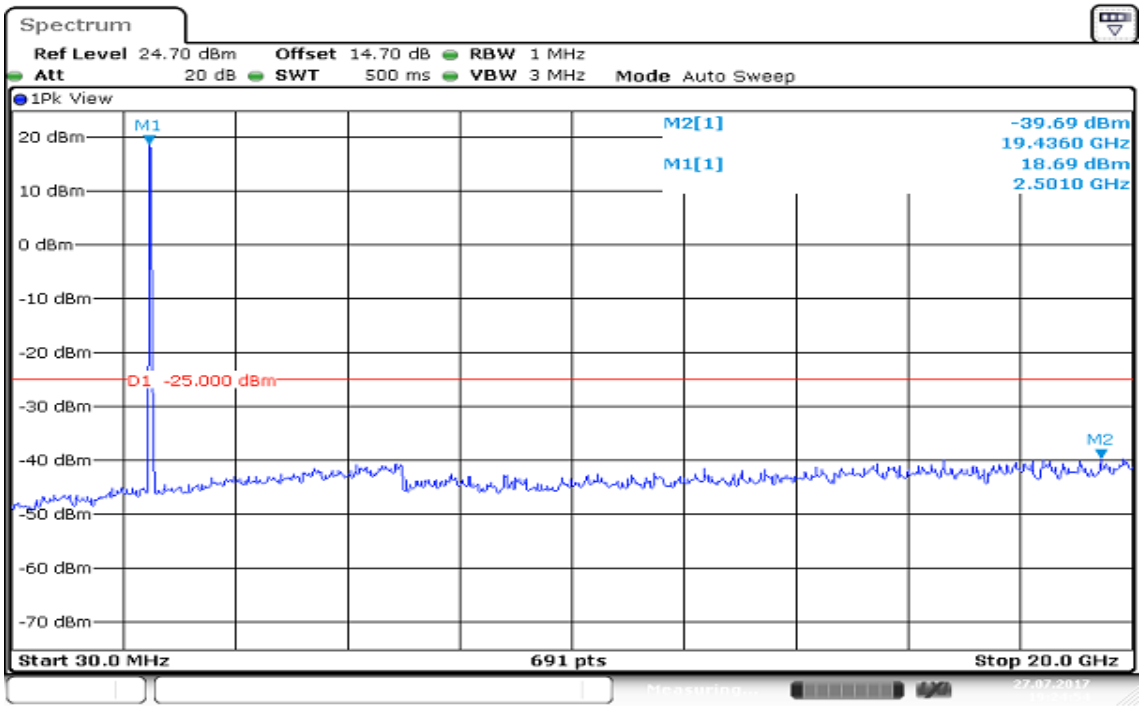
CH High



Date: 27.JUL.2017 19:24:16

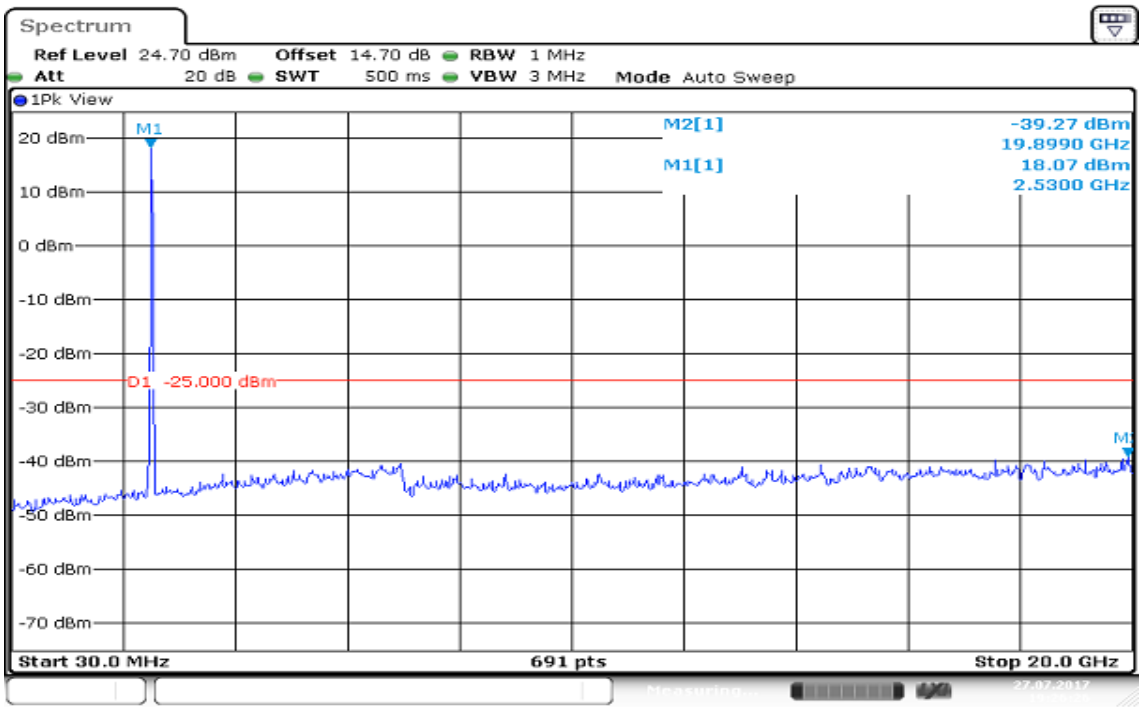
CHANNEL BANDWIDTH:20MHz /16QAM

CH Low



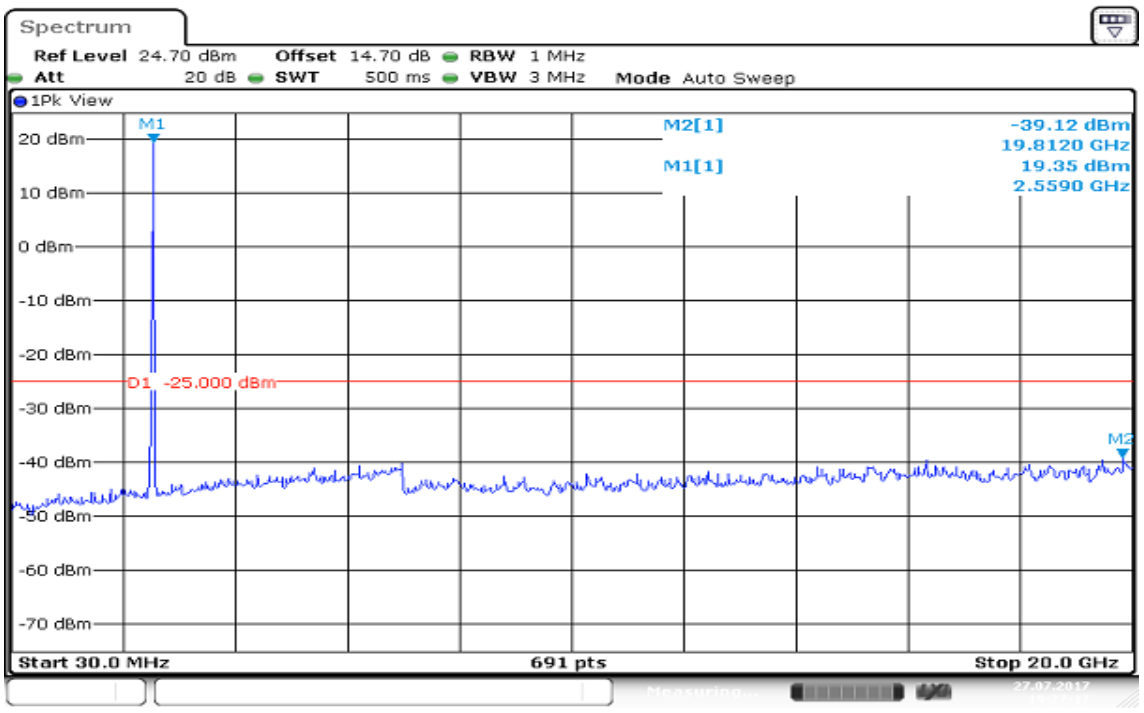
Date: 27.JUL.2017 19:24:54

CH Mid



Date: 27.JUL.2017 19:26:26

CH High


Spectrum
Ref Level 24.70 dBm Offset 14.70 dB RBW 1 MHz
Att 20 dB SWT 500 ms VBW 3 MHz Mode Auto Sweep
1Pk View
M1
M2[1] -39.12 dBm
19.8120 GHz
M1[1] 19.35 dBm
2.5590 GHz
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
D1 -25.000 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M2
Start 30.0 MHz
691 pts
Stop 20.0 GHz
Measuring...
27.07.2017
Date: 27.JUL.2017 19:27:17

7.8 RADIATED EMISSION MEASUREMENT

LIMITS

27.53(f), Band 13
For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

27.53, Band 7
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to -13dBm.
Limit Line: -13dBm

According to RSS-130, Band 13,
The power of any unwanted emissions in any 100 kHz bandwidth on any frequency outside the frequency range(s) within which the equipment is designed to operate shall be attenuated below the transmitter power, P (dBW), by at least 43 + 10 log10 p (watts), dB. However, in the100 kHz band immediately outside the equipment's operating frequency range, a resolution bandwidth of 30 kHz may be employed.

According to RSS-199, Band 7
For mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least:
(i) 40 + 10 log10 p from the channel edges to 5 MHz away
(ii) 43 + 10 log10 p between 5 MHz and X MHz from the channel edges, and
(iii) 55 + 10 log10 p at X MHz and beyond from the channel edges

In addition, the attenuation shall not be less than 43 + 10 log10 p on all frequencies between 2490.5 MHz and 2496 MHz, and 55 + 10 log10 p at or below 2490.5 MHz.

p is the transmitter power measured in watts and **X** is 6 MHz or the equipment occupied bandwidth, whichever is greater.

TEST PROCEDURES

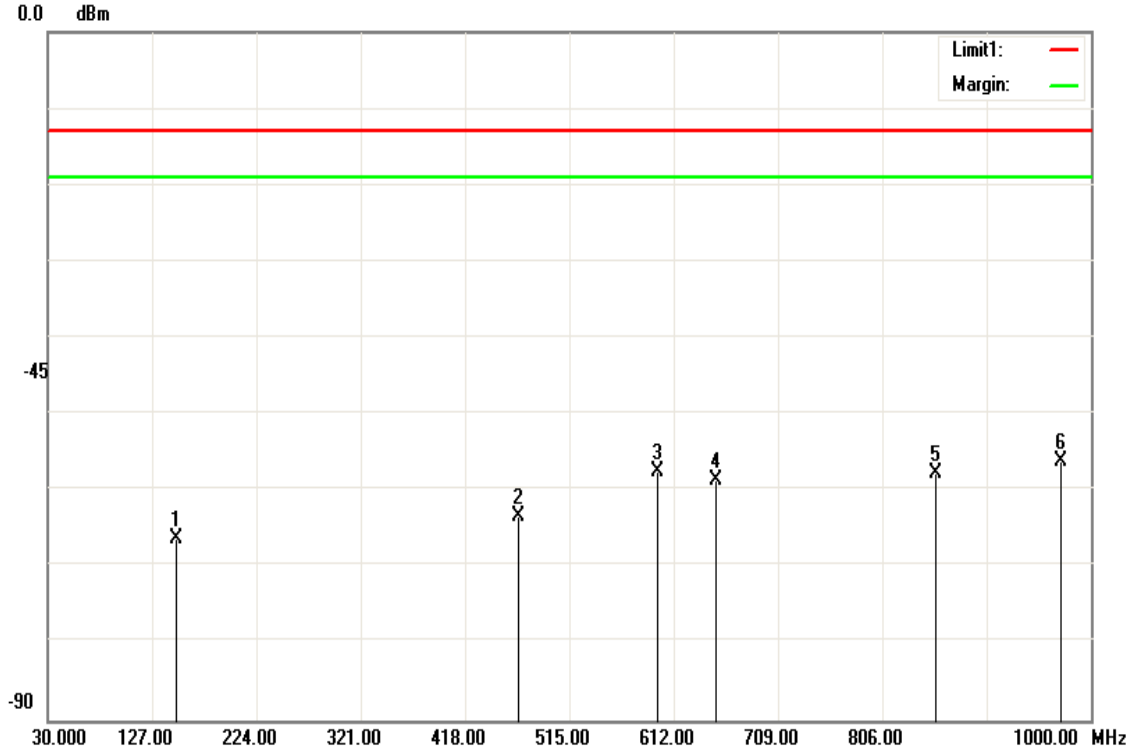
1. According to KDB 971168 D01. Photograph 5.8 and TIA-603-D:2010 Photograph 2.2.12.
2. The EUT was placed on a turntable
   (1) Below 1G : 0.8m
   (2) Above 1G : 1.5m
   (3) EUT set 3m from the receiving antenna
   (4) The table was rotated 360 degrees of the highest spurious emission to determine the position.
3. Set the spectrum analyzer , RBW=1MHz, VBW=3MHz.
4. A horn antenna was driven by a signal generator.
5. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.

Test Results

Below 1GHz

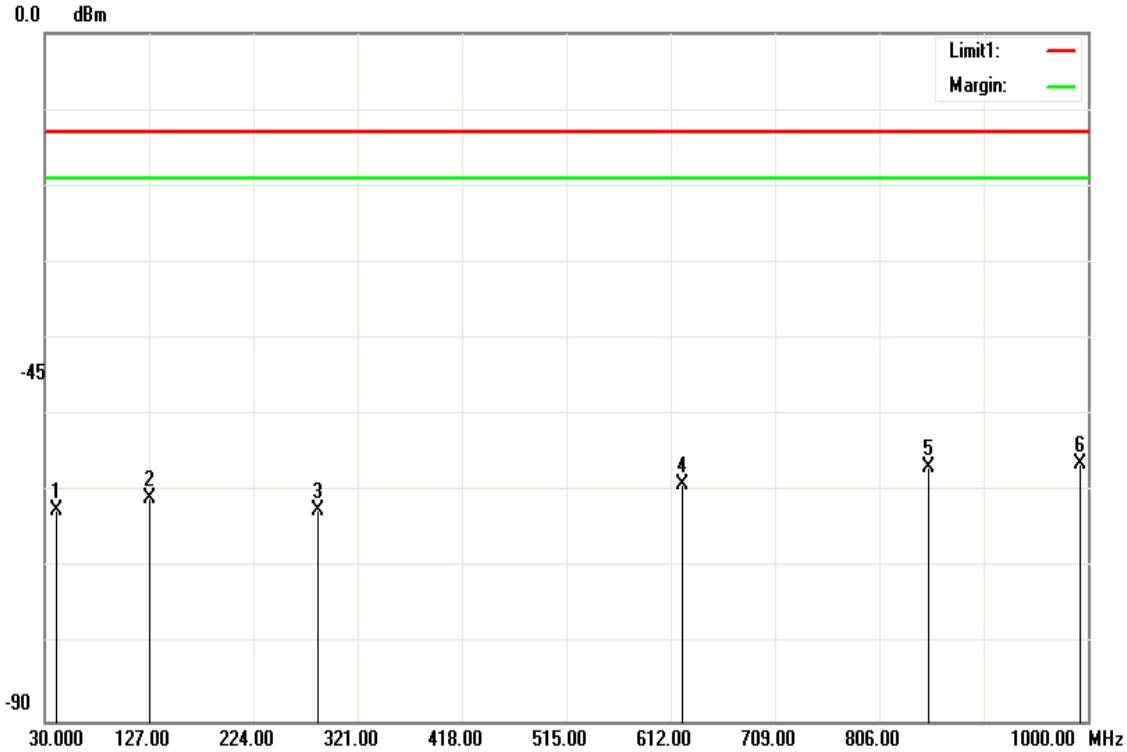
LTE Band 13 / BW: 10MHz / QPSK / RB =1, RB Offset = 0

Operation Mode:	Tx / Mid CH	**Test Date:**	April 12, 2017
Temperature:	22.1°C	**Tested by:**	Timmy Wang
Humidity:	50% RH	**Polarity:**	Ver.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
149.3100	-66.62	0.36	-66.26	-13.00	-53.26	V
467.4700	-70.32	6.96	-63.36	-13.00	-50.36	V
597.4500	-56.35	-1.15	-57.50	-13.00	-44.50	V
650.8000	-60	1.3	-58.70	-13.00	-45.70	V
855.4700	-58.92	1.2	-57.72	-13.00	-44.72	V
971.8700	-59.74	3.62	-56.12	-13.00	-43.12	V

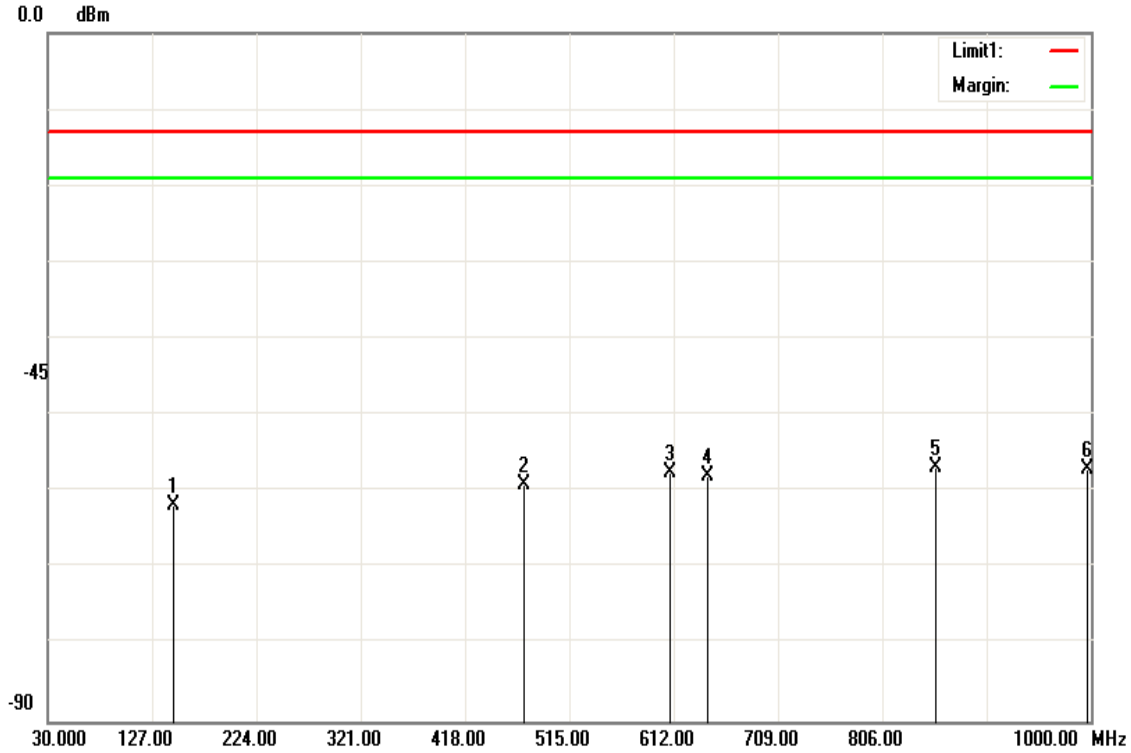
Operation Mode:	Tx / Mid CH	**Test Date:**	April 12, 2017
Temperature:	22.1°C	**Tested by:**	Timmy Wang
Humidity:	50% RH	**Polarity:**	Hor.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
40.6700	-56.65	-5.71	-62.36	-13.00	-49.36	H
127.0000	-61.91	1.01	-60.90	-13.00	-47.90	H
284.1400	-69.43	7.06	-62.37	-13.00	-49.37	H
622.6700	-58.75	-0.28	-59.03	-13.00	-46.03	H
851.5900	-57.88	1.18	-56.70	-13.00	-43.70	H
993.2100	-62.13	5.88	-56.25	-13.00	-43.25	H

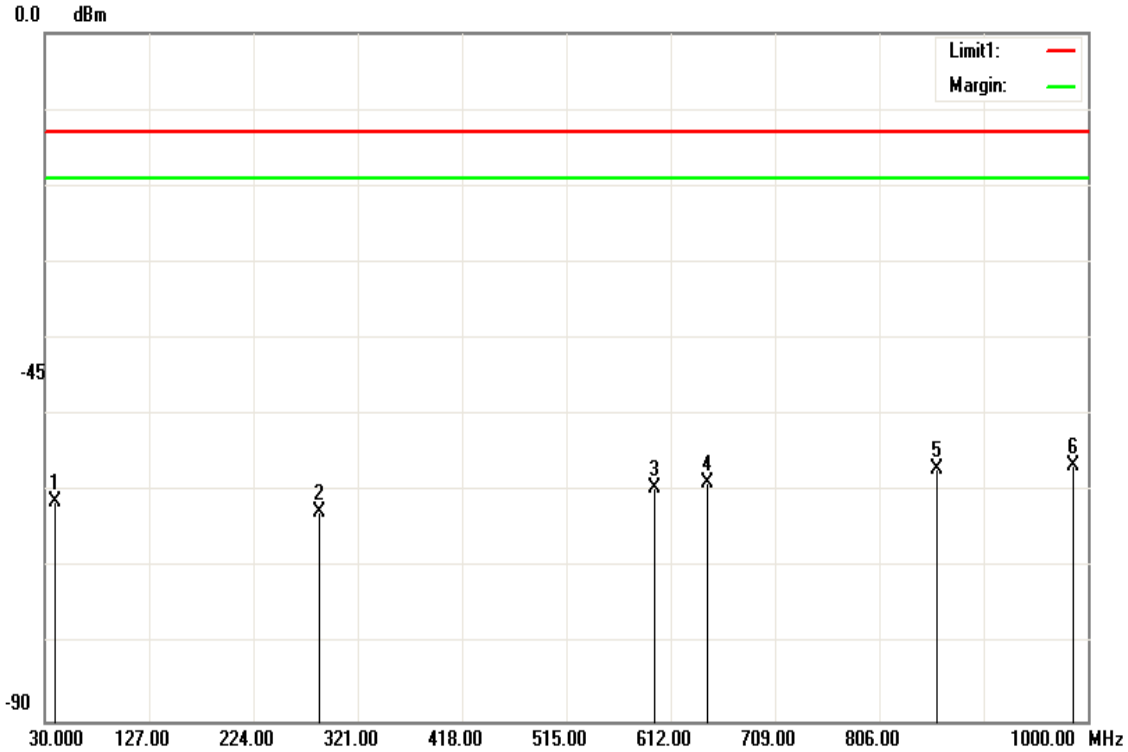
LTE Band 13 / BW: 10MHz / 16QAM / RB =1, RB Offset = 0

Operation Mode:	Tx / Mid CH	**Test Date:**	April 12, 2017
Temperature:	22.1°C	**Tested by:**	Timmy Wang
Humidity:	50% RH	**Polarity:**	Ver.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
147.3700	-62.3	0.54	-61.76	-13.00	-48.76	V
473.2900	-65.94	6.93	-59.01	-13.00	-46.01	V
609.0900	-56.47	-1.06	-57.53	-13.00	-44.53	V
644.0100	-58.92	0.95	-57.97	-13.00	-44.97	V
855.4700	-58.06	1.2	-56.86	-13.00	-43.86	V
996.1200	-63.33	6.19	-57.14	-13.00	-44.14	V

Operation Mode:	Tx / Mid CH	**Test Date:**	April 12, 2017
Temperature:	22.1°C	**Tested by:**	Timmy Wang
Humidity:	50% RH	**Polarity:**	Hor.

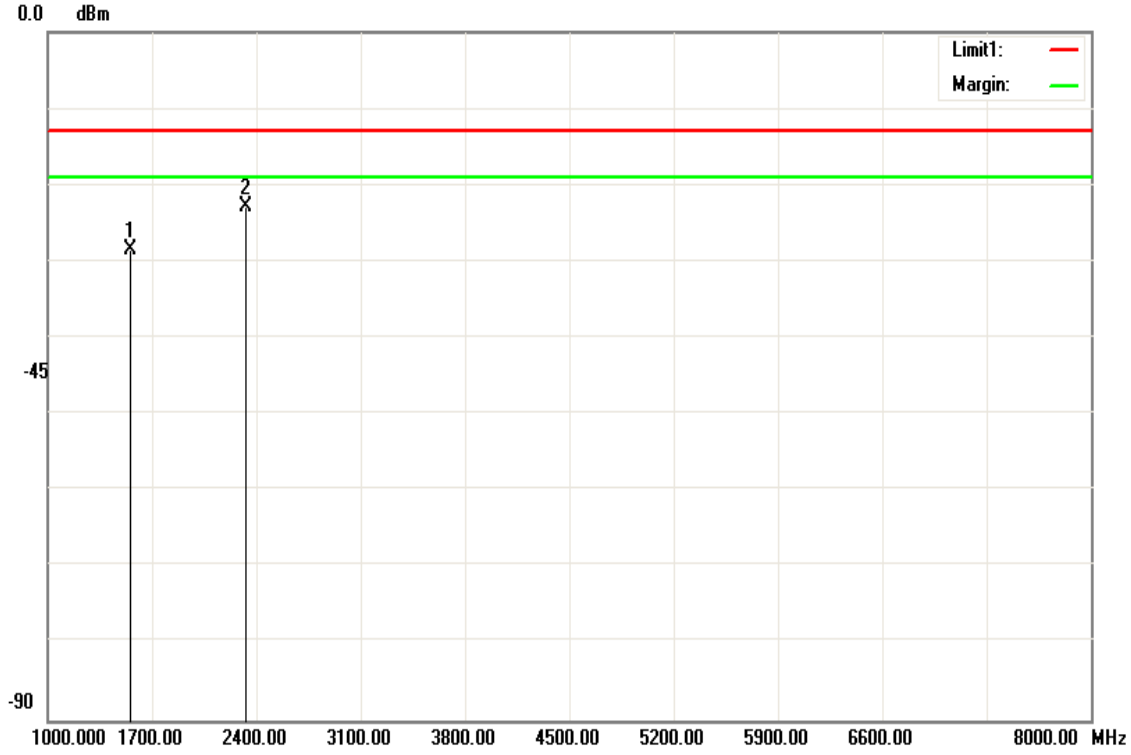


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
39.7000	-55.42	-5.91	-61.33	-13.00	-48.33	H
285.1100	-69.7	7.05	-62.65	-13.00	-49.65	H
597.4500	-58.33	-1.15	-59.48	-13.00	-46.48	H
645.9500	-59.97	1.06	-58.91	-13.00	-45.91	H
859.3500	-58.23	1.22	-57.01	-13.00	-44.01	H
986.4200	-61.7	5.16	-56.54	-13.00	-43.54	H

Above 1GHz

LTE Band 13 / BW: 10MHz / QPSK RB =1, RB Offset = 0

Operation Mode:	Tx / Mid CH	**Test Date:**	April 12, 2017
Temperature:	22.1°C	**Tested by:**	Timmy Wang
Humidity:	50% RH	**Polarity:**	Ver.

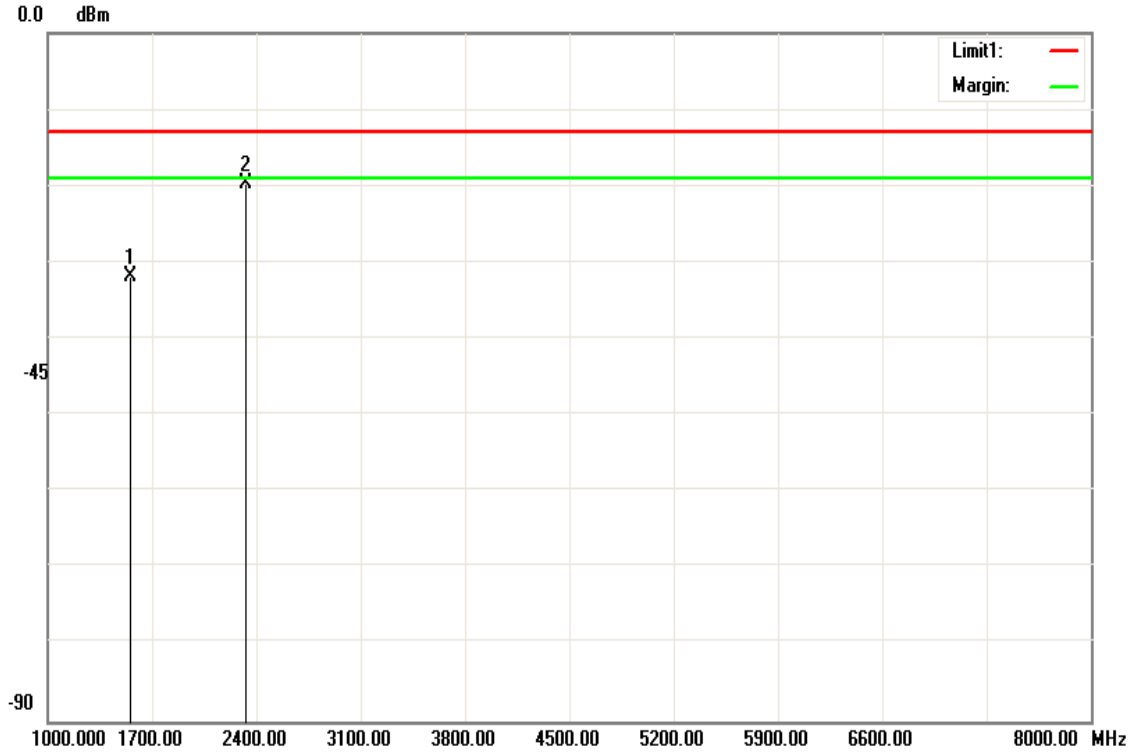


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1553.000	-29.92	1.53	-28.39	-13.00	-15.39	V
2330.000	-24.57	1.73	-22.84	-13.00	-9.84	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode:	Tx / Mid CH	**Test Date:**	April 12, 2017
Temperature:	22.1°C	**Tested by:**	Timmy Wang
Humidity:	50% RH	**Polarity:**	Hor.



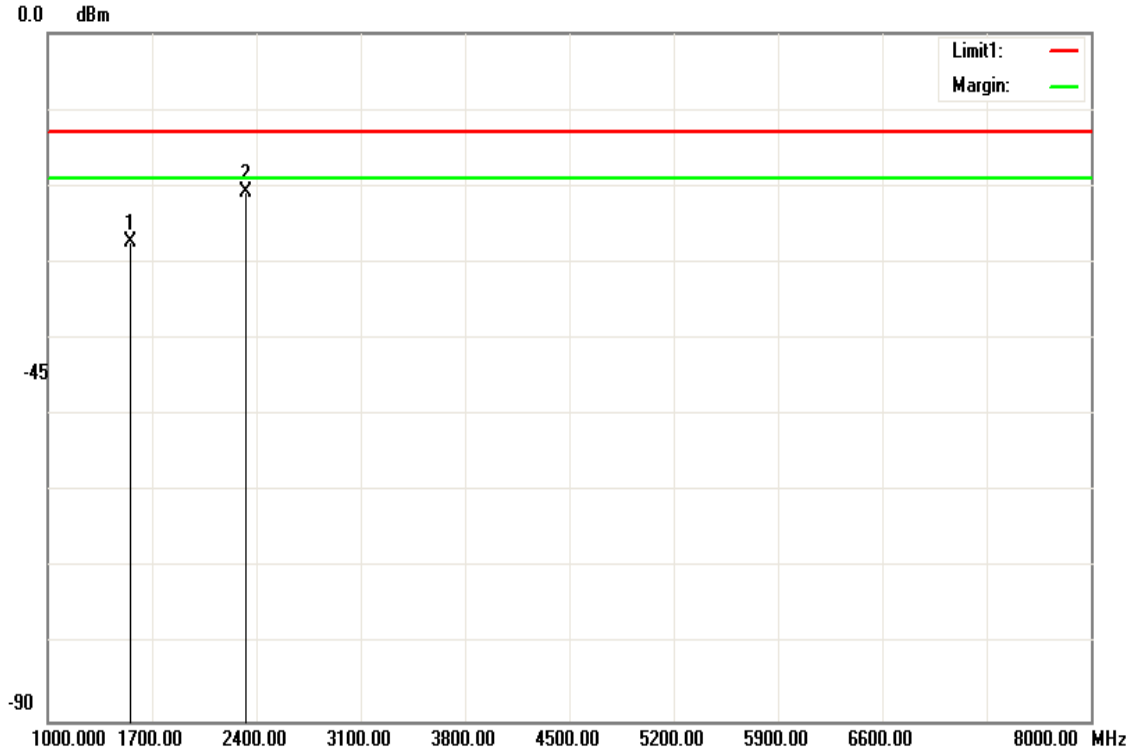
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1553.000	-33.34	1.53	-31.81	-13.00	-18.81	H
2330.000	-21.31	1.73	-19.58	-13.00	-6.58	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

LTE Band 13 / BW: 10MHz / 16QAM / RB =1, RB Offset = 0

Operation Mode:	Tx / Mid CH	**Test Date:**	April 12, 2017
Temperature:	22.1°C	**Tested by:**	Timmy Wang
Humidity:	50% RH	**Polarity:**	Ver.

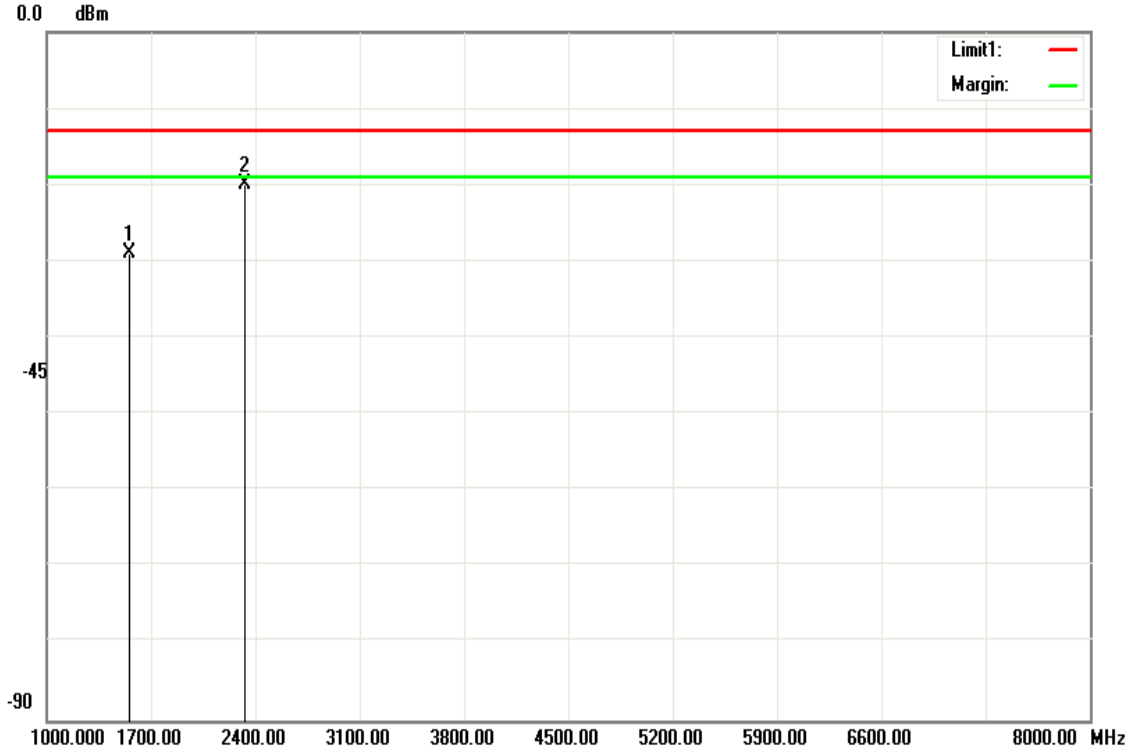


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1553.000	-28.83	1.53	-27.30	-13.00	-14.30	V
2330.000	-22.46	1.73	-20.73	-13.00	-7.73	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode:	Tx / Mid CH	**Test Date:**	April 12, 2017
Temperature:	22.1°C	**Tested by:**	Timmy Wang
Humidity:	50% RH	**Polarity:**	Hor.



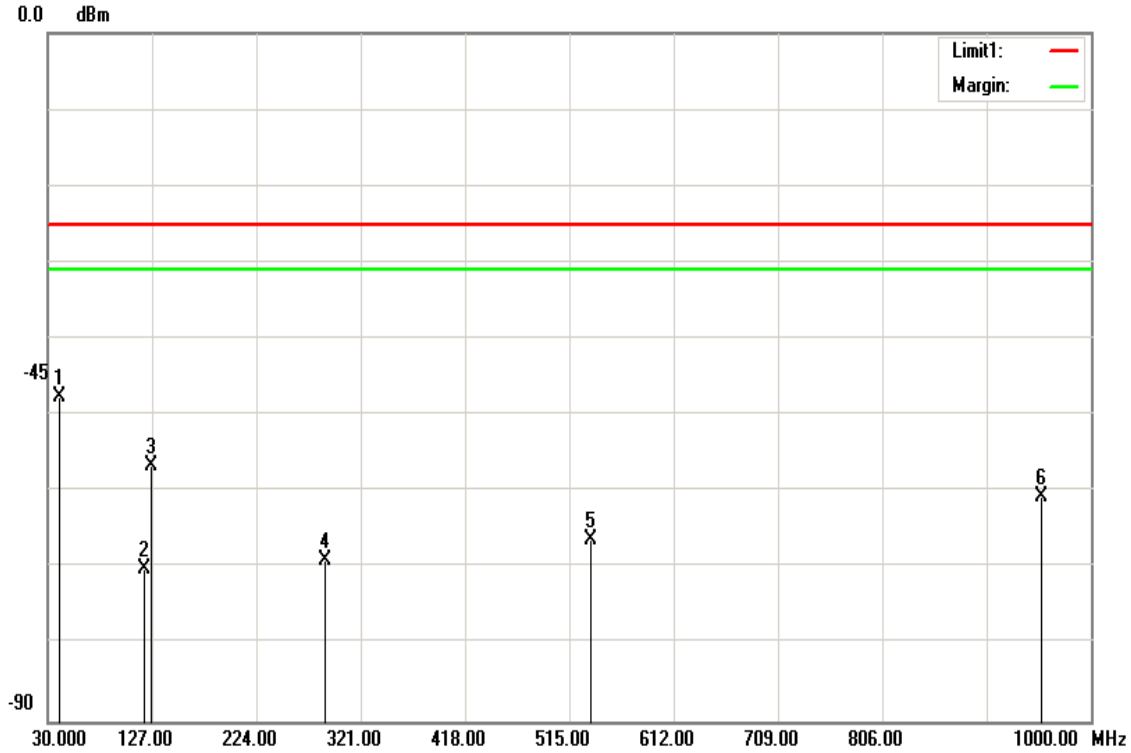
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1553.000	-30.38	1.53	-28.85	-13.00	-15.85	H
2330.000	-21.67	1.73	-19.94	-13.00	-6.94	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

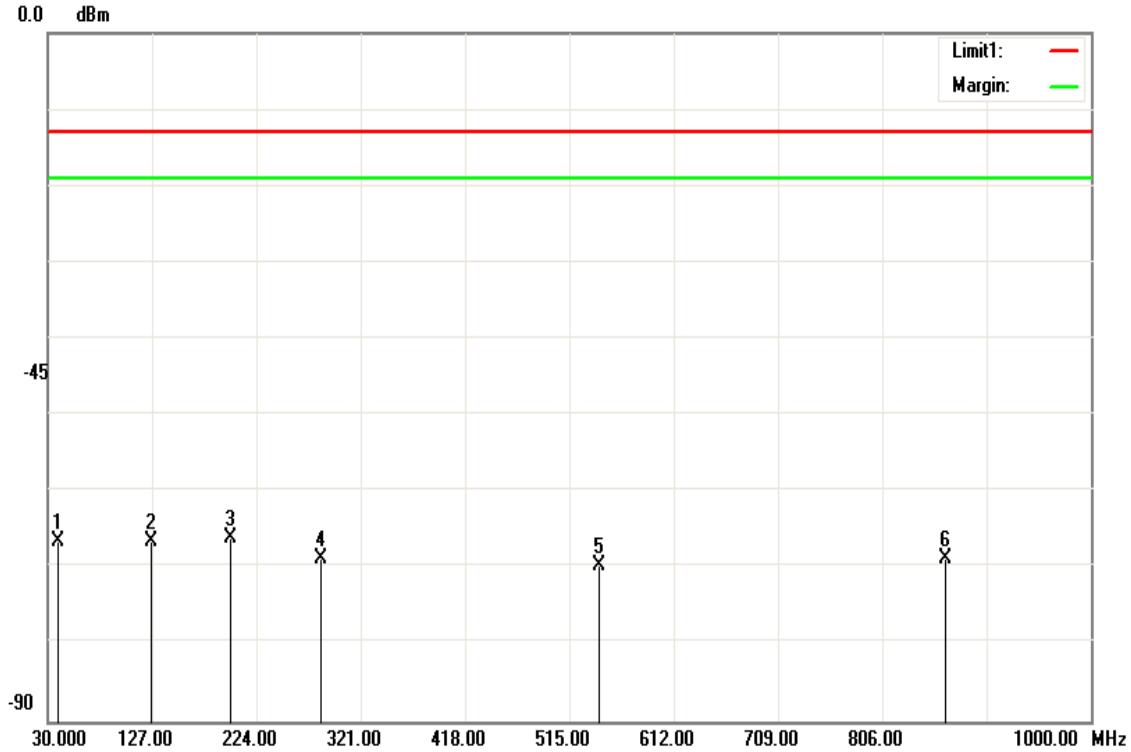
LTE Band 7 / BW: 20MHz / QPSK / RB =1, RB Offset = 0

Operation Mode:	Tx / Mid CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Ver.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
40.6700	-41.94	-5.71	-47.65	-25.00	-22.65	V
119.7500	-70.87	0.89	-69.98	-25.00	-44.98	V
126.0300	-57.65	0.99	-56.66	-25.00	-31.66	V
288.0200	-76	7.02	-68.98	-25.00	-43.98	V
535.3700	-73.18	6.84	-66.34	-25.00	-41.34	V
953.4400	-62.29	1.67	-60.62	-25.00	-35.62	V

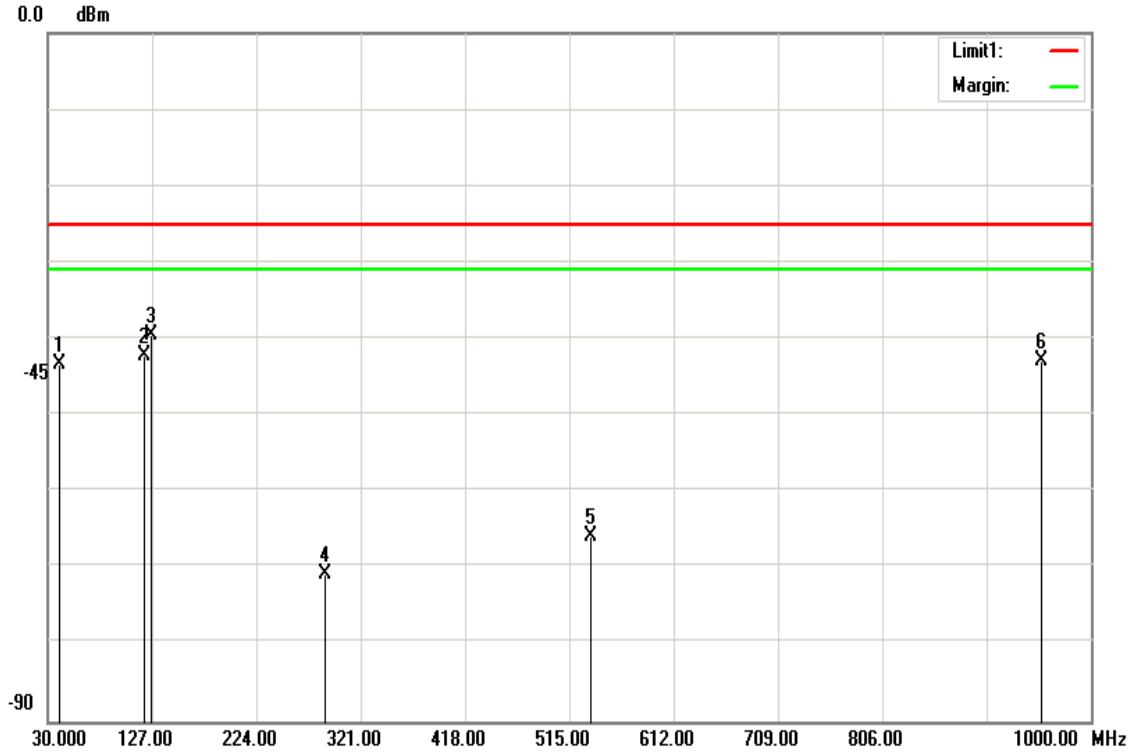
Operation Mode:	Tx / Mid CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Hor.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
51.3400	-45.48	-2.17	-47.65	-25.00	-22.65	H
179.3800	-60.61	3.95	-56.66	-25.00	-31.66	H
240.4900	-76.75	6.77	-69.98	-25.00	-44.98	H
279.2900	-76.09	7.11	-68.98	-25.00	-43.98	H
481.0500	-73.23	6.89	-66.34	-25.00	-41.34	H
603.2700	-59.23	-1.39	-60.62	-25.00	-35.62	H

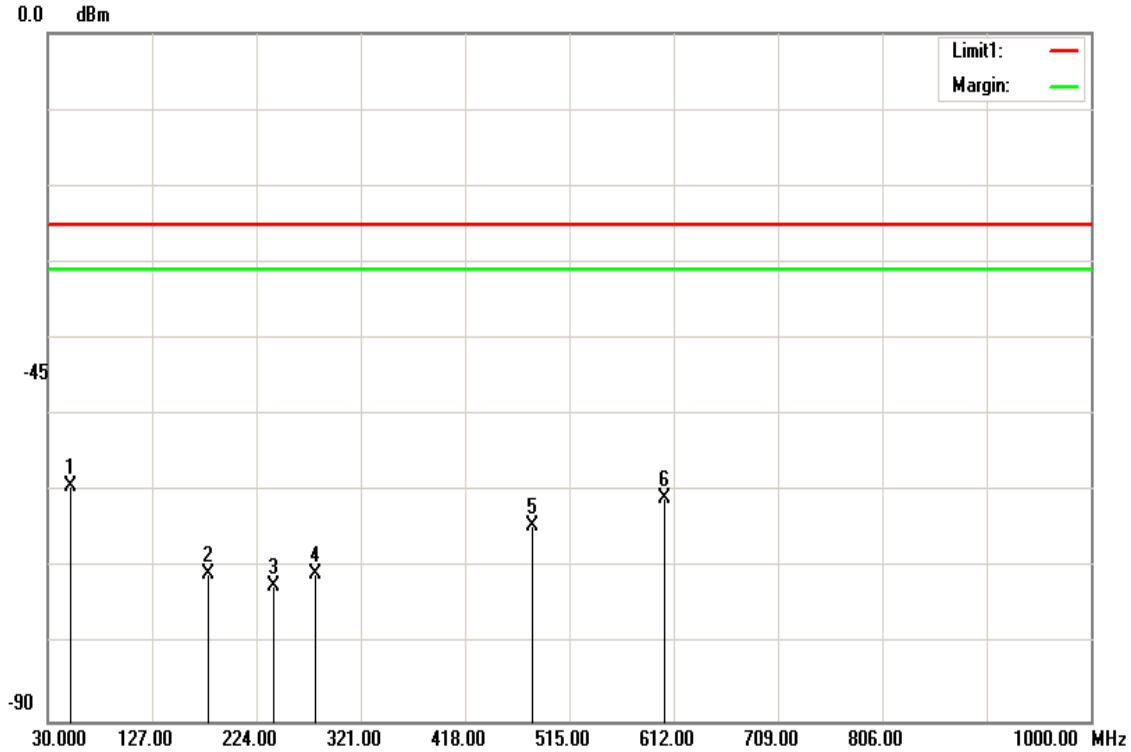
LTE Band 7 / BW: 20MHz / 16QAM / RB =1, RB Offset = 0

Operation Mode:	Tx / Mid CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Ver.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
40.6700	-37.56	-5.71	-43.27	-25.00	-18.27	V
119.7500	-43.08	0.89	-42.19	-25.00	-17.19	V
126.0300	-40.45	0.99	-39.46	-25.00	-14.46	V
288.0200	-77.83	7.02	-70.81	-25.00	-45.81	V
535.3700	-72.69	6.84	-65.85	-25.00	-40.85	V
953.4400	-44.45	1.67	-42.78	-25.00	-17.78	V

Operation Mode:	Tx / Mid CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Hor.

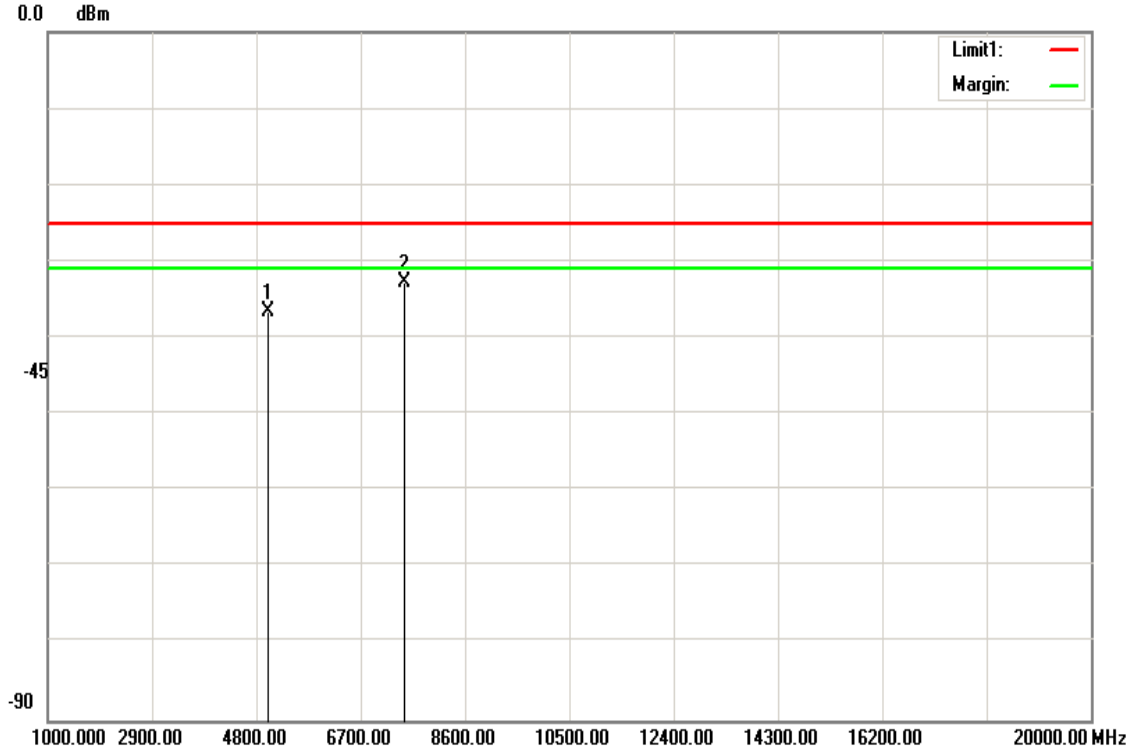


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
51.3400	-57.15	-2.17	-59.32	-25.00	-34.32	H
179.3800	-74.78	3.95	-70.83	-25.00	-45.83	H
240.4900	-79.14	6.77	-72.37	-25.00	-47.37	H
279.2900	-77.95	7.11	-70.84	-25.00	-45.84	H
481.0500	-71.36	6.89	-64.47	-25.00	-39.47	H
603.2700	-59.5	-1.39	-60.89	-25.00	-35.89	H

Above 1GHz

LTE Band 7 / BW: 20MHz / QPSK RB =1, RB Offset = 0

Operation Mode:	Tx / Low CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Ver.

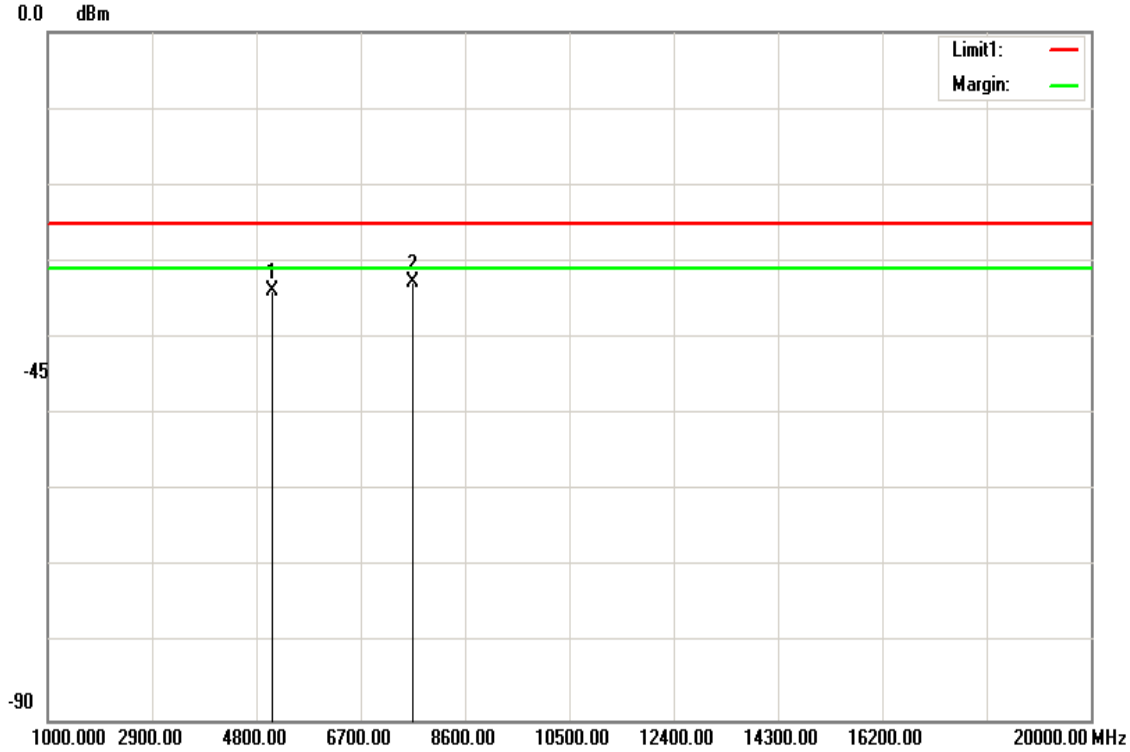


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5004.000	-49.07	12.5	-36.57	-25.00	-11.57	V
7503.000	-43.36	10.6	-32.76	-25.00	-7.76	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode:	Tx / Low CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Hor.

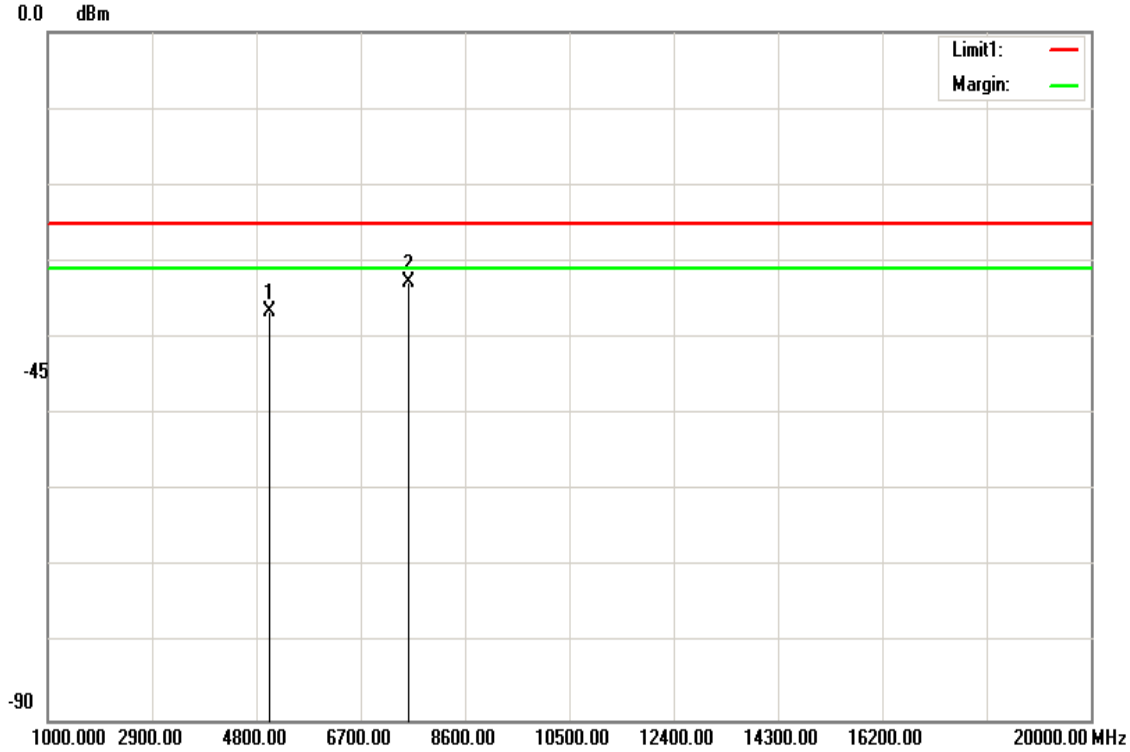


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5102.000	-46.55	12.58	-33.97	-25.00	-8.97	H
7650.000	-43.25	10.6	-32.65	-25.00	-7.65	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode:	Tx / Mid CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Ver.

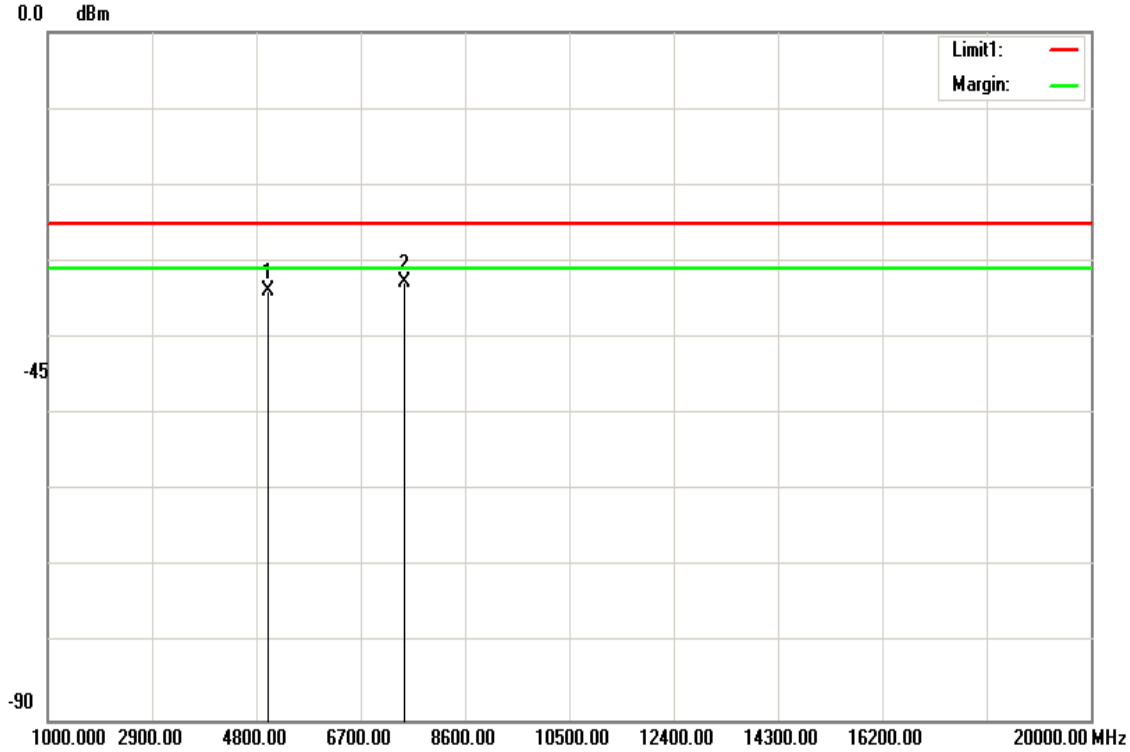


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5053.000	-49.11	12.54	-36.57	-25.00	-11.57	V
7580.000	-43.36	10.6	-32.76	-25.00	-7.76	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode:	Tx / Mid CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Hor.

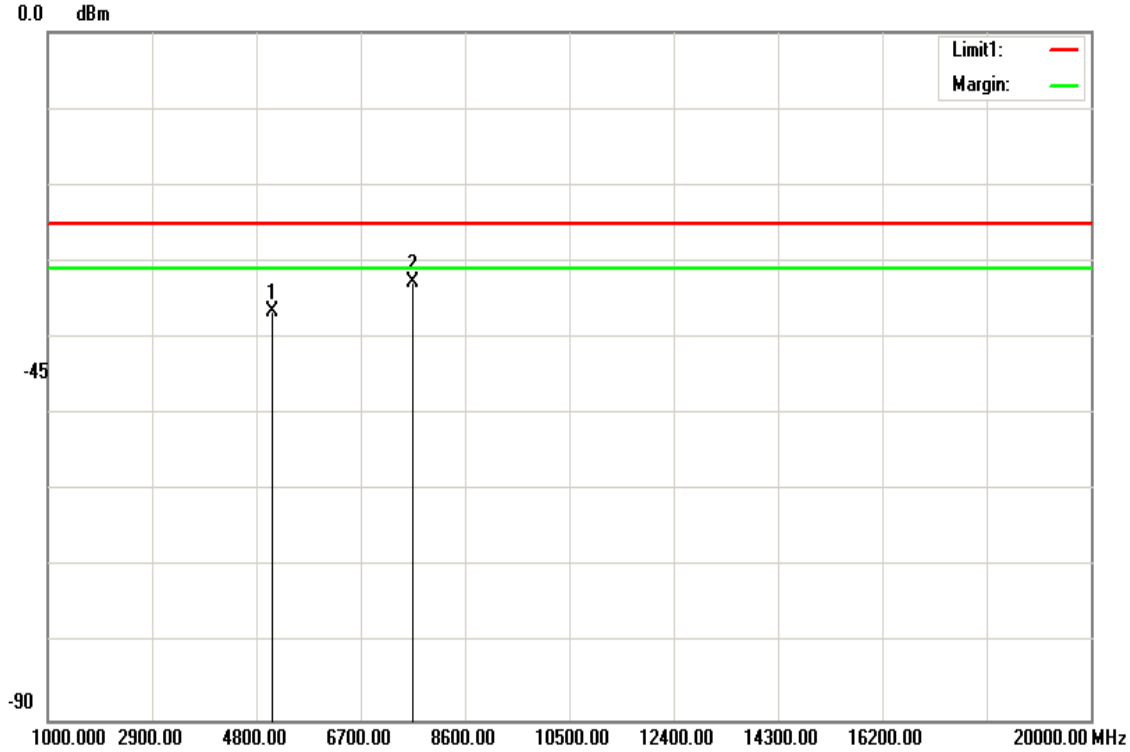


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5004.000	-46.47	12.5	-33.97	-25.00	-8.97	H
7503.000	-43.25	10.6	-32.65	-25.00	-7.65	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode:	Tx / High CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Ver.

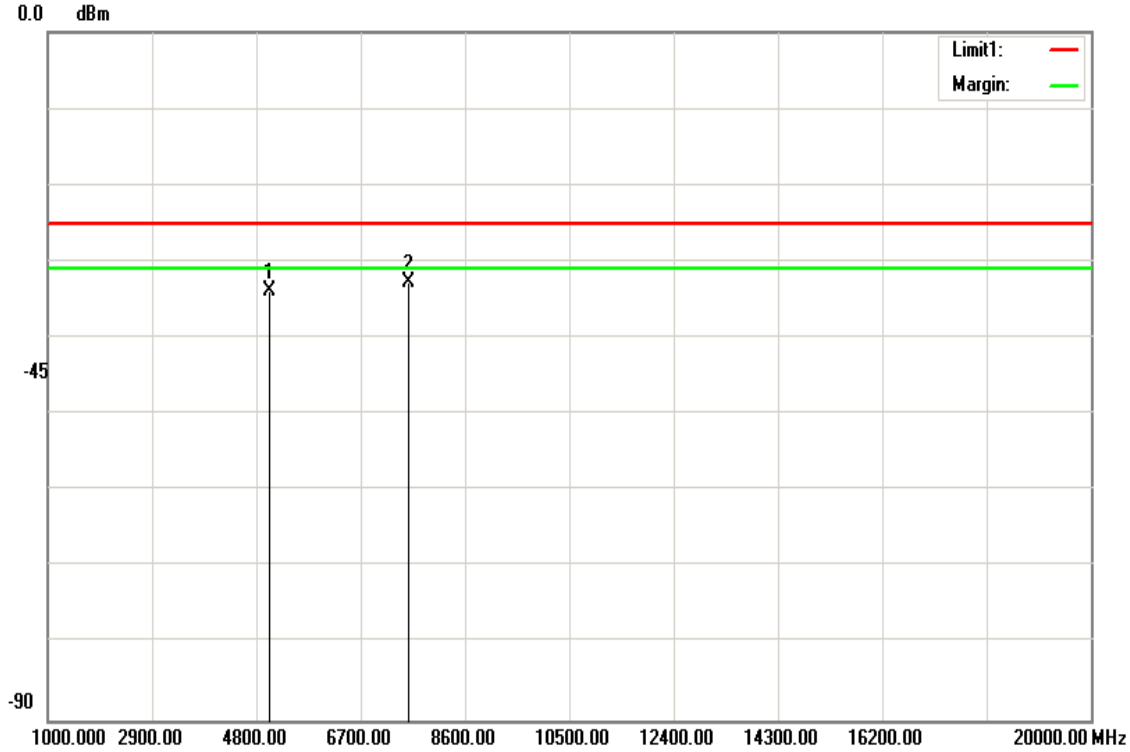


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5102.000	-49.15	12.58	-36.57	-25.00	-11.57	V
7650.000	-43.36	10.6	-32.76	-25.00	-7.76	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode:	Tx / High CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Hor.



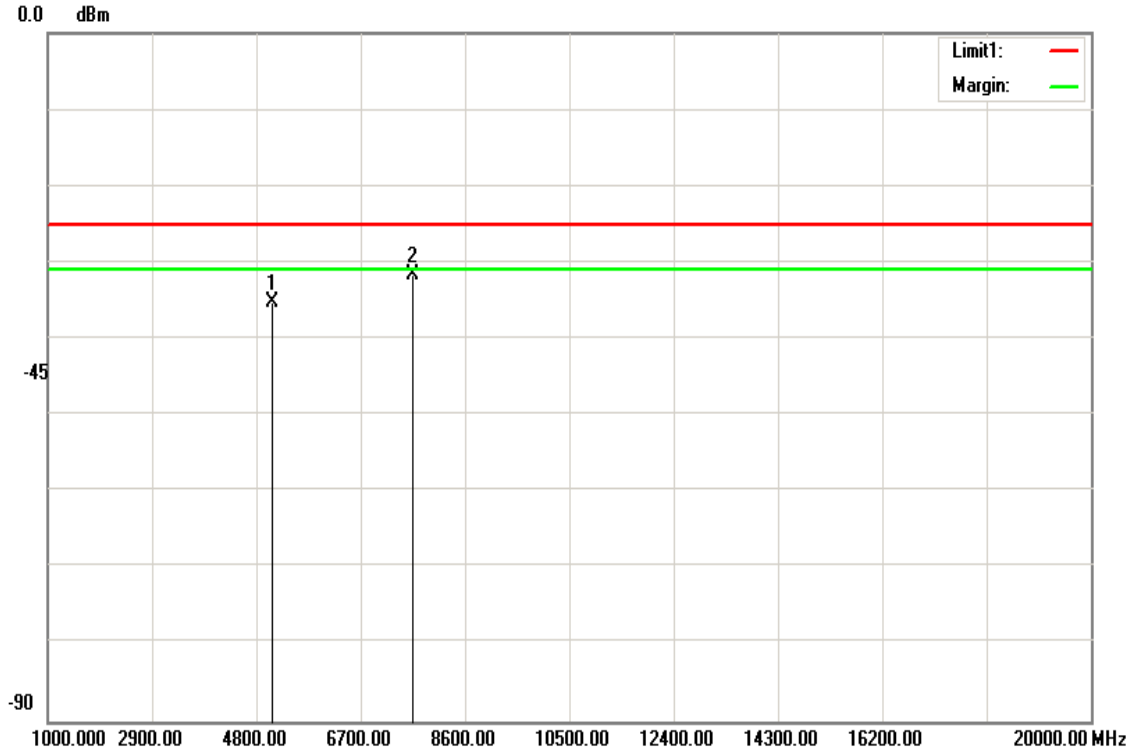
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5053.000	-46.51	12.54	-33.97	-25.00	-8.97	H
7580.000	-43.25	10.6	-32.65	-25.00	-7.65	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

LTE Band 7 / BW: 20MHz / 16QAM / RB =1, RB Offset = 0

Operation Mode:	Tx / Low CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Ver.

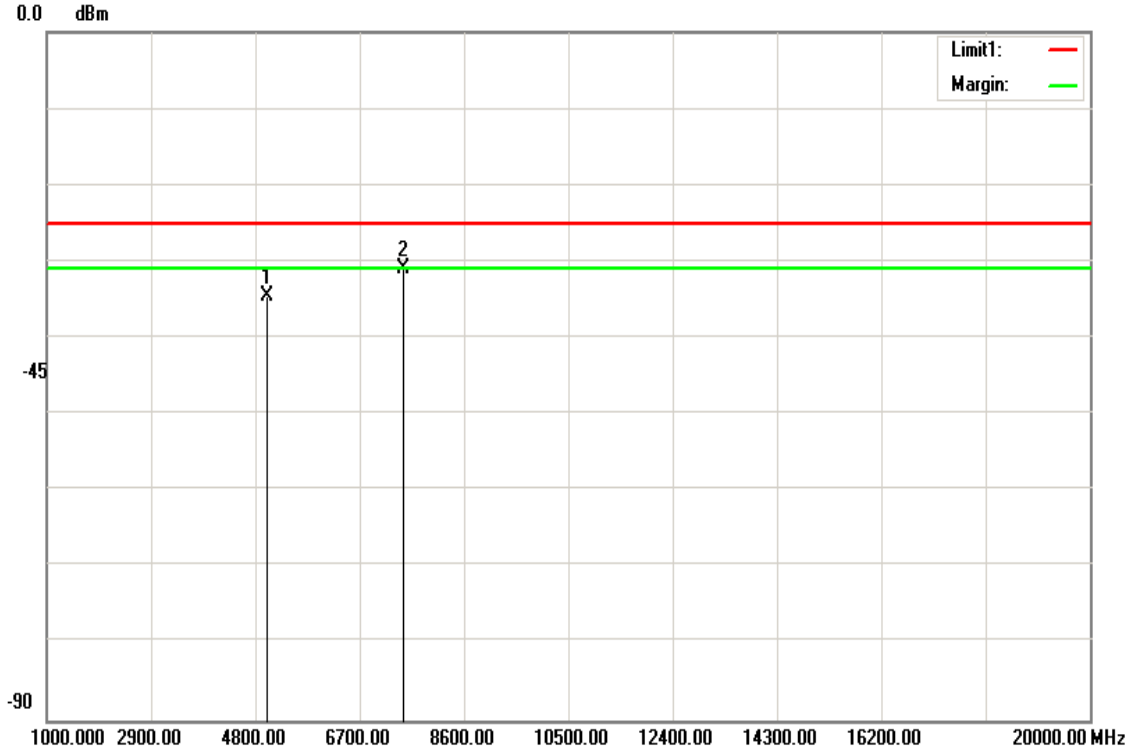


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5102.000	-47.75	12.58	-35.17	-25.00	-10.17	V
7650.000	-42.12	10.6	-31.52	-25.00	-6.52	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode:	Tx / Low CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Hor.

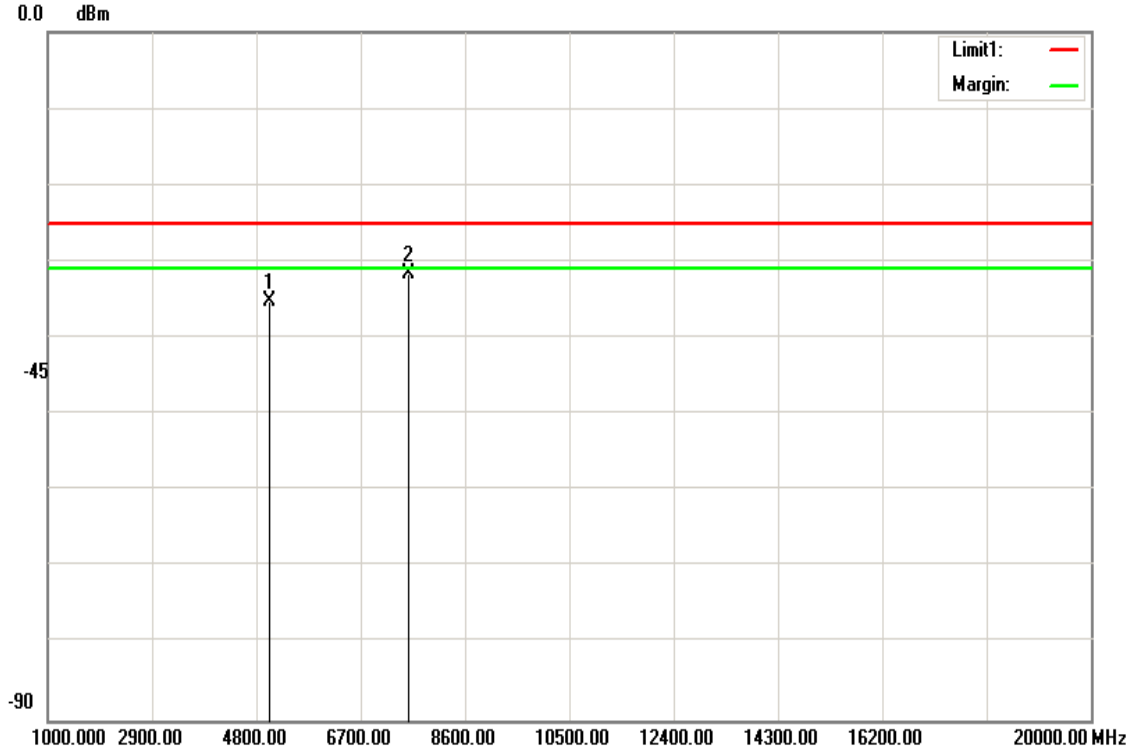


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5004.000	-47.06	12.5	-34.56	-25.00	-9.56	H
7503.000	-41.45	10.6	-30.85	-25.00	-5.85	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode:	Tx / Mid CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Ver.

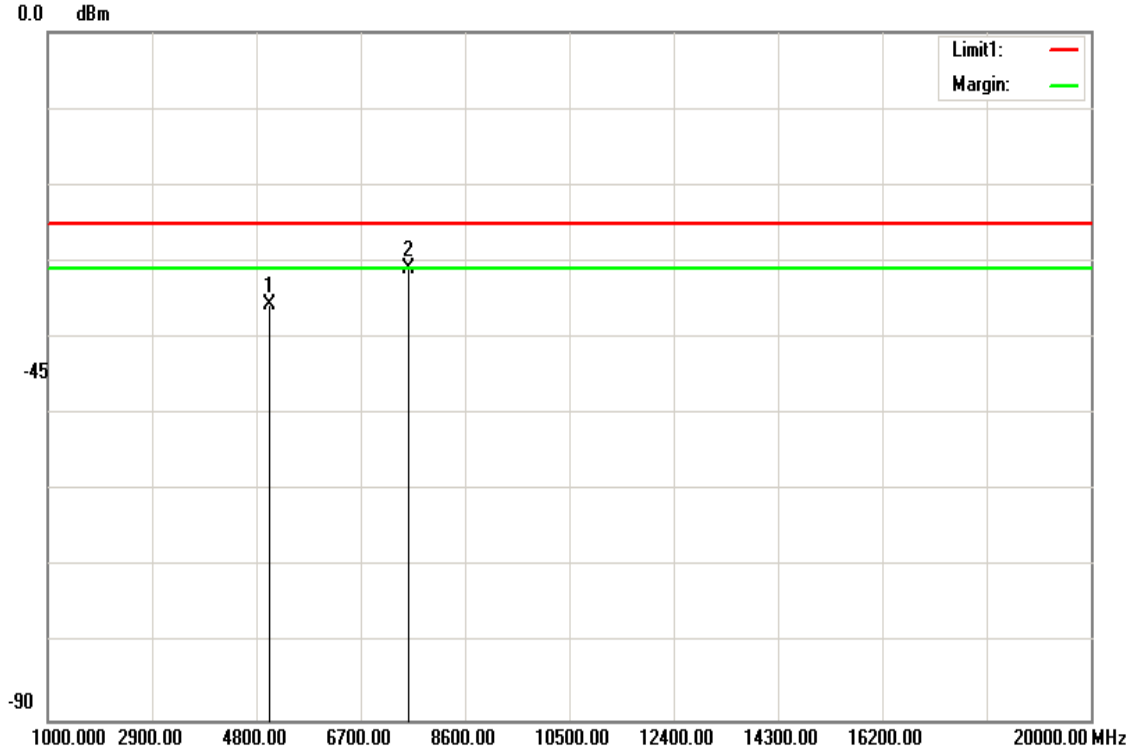


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5053.000	-47.71	12.54	-35.17	-25.00	-10.17	V
7580.000	-42.12	10.6	-31.52	-25.00	-6.52	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode:	Tx / Mid CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Hor.

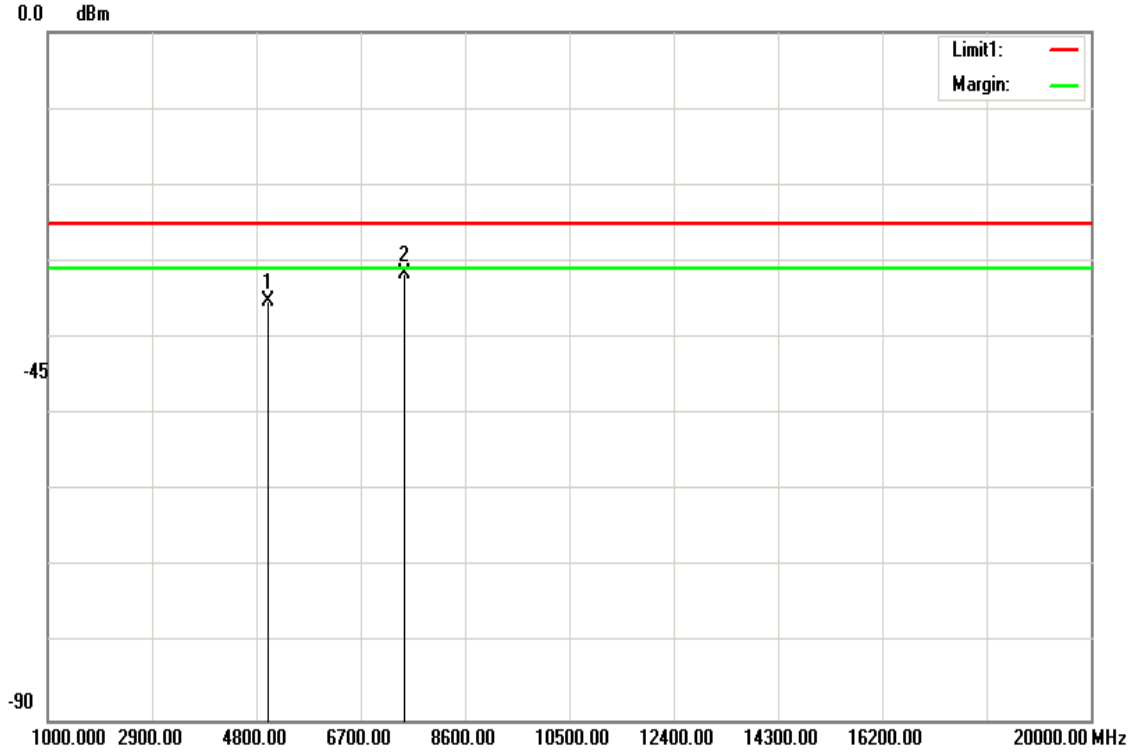


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5053.000	-48.25	12.54	-35.71	-25.00	-10.71	H
7580.000	-41.45	10.6	-30.85	-25.00	-5.85	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode:	Tx / High CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Ver.

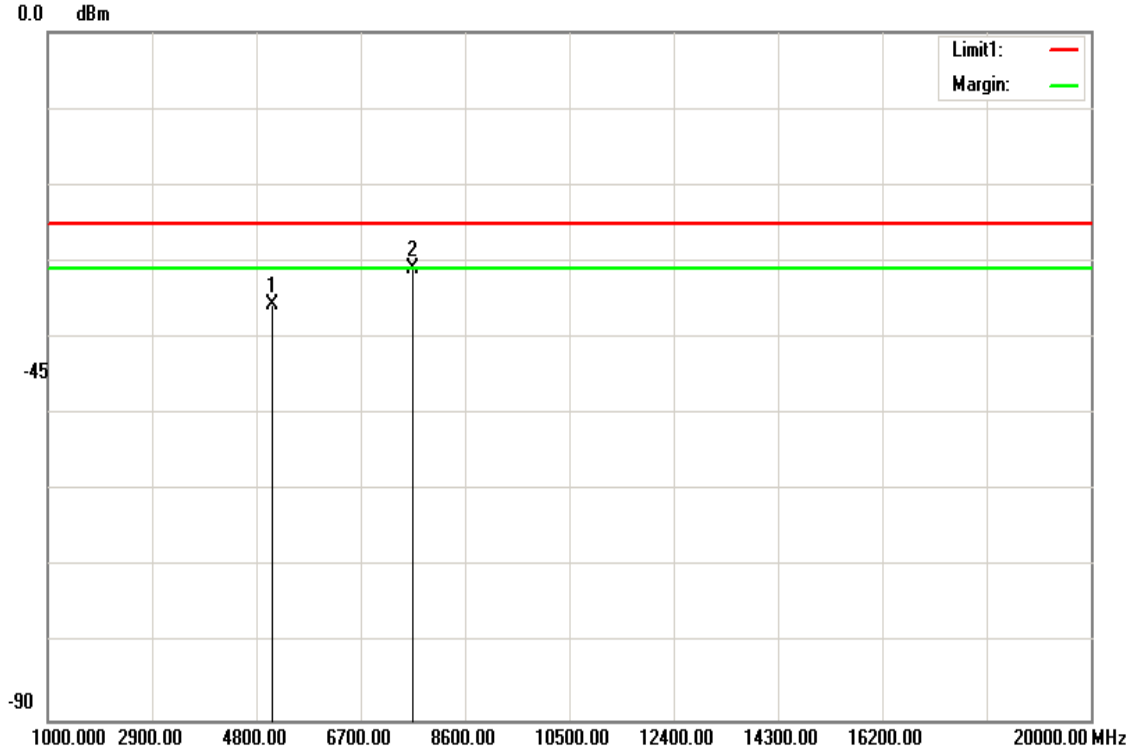


Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5004.000	-47.67	12.5	-35.17	-25.00	-10.17	V
7503.000	-42.12	10.6	-31.52	-25.00	-6.52	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode:	Tx / High CH	**Test Date:**	April 21, 2017
Temperature:	20°C	**Tested by:**	Timmy Wang
Humidity:	52% RH	**Polarity:**	Hor.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5102.000	-48.29	12.58	-35.71	-25.00	-10.71	H
7650.000	-41.45	10.6	-30.85	-25.00	-5.85	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.